Appendix A. Steering Committee Members

Appendix B. Sample of Randomized Controlled Trials

The following are citations for the RCTs that were assessed using the Cochrane Risk of Bias tool. The 30 RCTs that were used to examine reliability of consensus assessments by individual reviewers are marked with an asterisk (*). Overall 154 RCTs were included in the final sample. We assessed 161 RCTs but replaced 7 of these as they did not evaluate therapeutic interventions (Beedie et al., Boardman et al., D'Souza et al., Dyke et al., Kamlin et al., Pierce et al., Umemura et al.).

- 1. Acevedo B, Gomez-Palomares J, Ricciarelli E, Hernandez E. Triggering ovulation with gonadotropin-releasing hormone agonists does not compromise embryo implantation rates. Fertil Steril 2006;86(6):1682-7.
- 2. Adeboyeku D, Scott S, Hodson M. Open follow-up study of tobramycin nebuliser solution and colistin in patients with cystic fibrosis. J Cyst Fibros 2006;5(4):261-3.
- 3. *Andersen F, Hedegaard K, Petersen T, et al. Comparison of the effect of glycerol and triamcinolone acetonide on cumulative skin irritation in a randomized trial. J Am Acad Dermatol 2006;56(2):228-35.
- Argyriou A, Chroni E, Polychronopoulos P, et al. Efficacy of oxcarbazepine for prophylaxis against cumulative oxaliplatininduced neuropathy. Neurology 2006;67(12):2253-5.
- 5. *Aslam S, Santha T, Leone A, Wilcox C. Effects of amlodipine and valsartan on oxidative stress and plasma methylarginines in end-stage renal disease patients on hemodialysis. Kidney Int 2006;70(12):2109-15
- *Baker R, Squires B, Gargan M, Bannister G. Total Hip Arthroplasty and Hemiarthroplasty in Mobile, Independent Patients with a Displaced Intracapsular Fracture of the Femoral Neck. A Randomized, Controlled Trial. J Bone Joint Surg Am 2006;88(12):2583-9.
- 7. Baron J, Sandler R, Bresalier R, et al. A randomized trial of rofecoxib for the chemoprevention of colorectal adenomas. Gastroenterology 2006;131(6):1674-82.

- 8. Barth M, Capelle H, Weidauer S, et al. Effect of Nicardipine Prolonged-Release Implants on Cerebral Vasospasm and Clinical Outcome After Severe Aneurysmal Subarachnoid Hemorrhage. Stroke 2006;38(2):330-6.
- 9. Beedie C, Stuart E, Coleman D, Foad A. Placebo Effects of Caffeine on Cycling Performance. Med Sci Sports Exerc 2006;38(12):2159-64.
- Bertrand O, De Larochelliere R, Rodes-Cabau J, et al. A Randomized Study Comparing Same-Day Home Discharge and Abciximab Bolus Only to Overnight Hospitalization and Abciximab Bolus and Infusion After Transradial Coronary Stent Implantation. Circulation 2006;114(24):2636-43.
- 11. Bisschop C, Montandon G, Guenard H. Expiratory muscles modulate negative expiratory pressure-induced flow during muscular exercise. Respir Physiol Neurobiol 2006;154(3):453-66.
- 12. *Bisser S, N'Siesi F, Lejon V, et al. Equivalence Trial of Melarsoprol and Nifurtimox Monotherapy and Combination Therapy for the Treatment of Second-Stage Trypanosoma brucei gambiense Sleeping Sickness. J Infect Dis 2006;195(3):322-9.
- 13. Blackhurst D, Marais A. Concomitant consumption of red wine and polyunsaturated fatty acids in edible oil does not influence the peroxidation status of chylomicron lipids despite increasing plasma catechin concentration. Nutr Metab Cardiovasc Dis 2006;16(8):550-8.

- 14. Boardman T, Catley D, Grobe J, Little T, Ahluwalia J. Using motivational interviewing with smokers: Do therapist behaviors relate to engagement and therapeutic alliance? J Subst Abuse Treat 2006;31(4):329-39.
- 15. Budweiser S, Moertl M, Jorres R, et al. Respiratory Muscle Training in Restrictive Thoracic Disease: A Randomized Controlled Trial. Arch Phys Med Rehabil 2006;87(12):1559-65.
- Cardinale D, Colombo A, Sandri M, et al. Prevention of high-dose chemotherapyinduced cardiotoxicity in high-risk patients by angiotensin-converting enzyme inhibition. Circulation 2006;114(23):2474-81.
- 17. *Carlbring P, Bohman S, Brunt S, et al. Remote Treatment of Panic Disorder: A Randomized Trial of Internet-Based Cognitive Behavior Therapy Supplemented With Telephone Calls. Am J Psychiatry 2006;163(12):2119-25.
- 18. Christensen H, Griffiths K, Mackinnon A, Brittliffe K. Online randomized controlled trial of brief and full cognitive behaviour therapy for depression. Psychol Med 2006;36(12):1737-46.
- 19. Chu M, Cosper P, Nakhuda G, Lobo R. A comparison of oral and transdermal short-term estrogen therapy in postmenopausal women with metabolic syndrome. Fertil Steril 2006;86(6):1669-75.
- 20. Church C, Price C, Pandyan A, et al. Randomized Controlled Trial to Evaluate the Effect of Surface Neuromuscular Electrical Stimulation to the Shoulder After Acute Stroke. Stroke 2006;37(12):2995-3001.
- 21. Clarenbach J, Reber M, Lutjohann D, von Bergmann K, Sudhop T. The lipid-lowering effect of ezetimibe in pure vegetarians. J Lipid Res 2006;47(12):2820-4.

- 22. Coullet J, Guell J, Fournie P, et al. Irissupported Phakic Lenses (Rigid vs Foldable Version) for Treating Moderately High Myopia: Randomized Paired Eye Comparison. Am J Ophthalmol 2006;142(6):909-16.
- 23. D'Souza D, Gil R, Madonick S, et al. Enhanced Sensitivity to the Euphoric Effects of Alcohol in Schizophrenia. Neuropsychopharmacology 2006;31(12):2767-75.
- 24. Damji K, Bovell A, Hodge W, et al. Selective laser trabeculoplasty versus argon laser trabeculoplasty: results from a 1-year randomised clinical trial. Br J Ophthalmol 2006;90(12):1490-4.
- Denberg T, Kim F, Flanigan R, et al. The Influence of Patient Race and Social Vulnerability on Urologist Treatment Recommendations in Localized Prostate Carcinoma. Med Care 2006;44(12):1137-41.
- 26. di Visconte M, Di Bella R, Munegato G. Randomized, Prospective Trial Comparing 0.25 Percent Glycerin Trinitrate Ointment and Anal Cryothermal Dilators Only with 0.25 Percent Glycerin Trinitrate Ointment and Only with Anal Cryothermal Dilators in the Treatment of Chronic Anal Fissure: A Two-Yea. Dis Colon Rectum 2006;49(12):1822-30.
- 27. Dolegowska B, Pikula E, Safranow K, et al. Metabolism of eicosanoids and their action on renal function during ischaemia and reperfusion: the effect of alprostadil. Prostaglandins Leukot Essent Fatty Acids 2006;75(6):403-11.
- 28. Donatelli F, Schricker T, Parrella P, et al. Intraoperative Infusion of Amino Acids Induces Anabolism Independent of the Type of Anesthesia. Anesth Analg 2006;103(6):1549-56.
- 29. Dyke C, Steinhubl S, Kleiman N, et al. First-in-Human Experience of an Antidote-Controlled Anticoagulant Using RNA Aptamer Technology A Phase 1a Pharmacodynamic Evaluation of a Drug-Antidote Pair for the Controlled Regulation of Factor Ixa Activity. Circulation 2006;114(23):2490-7.

- 30. East J, Suzuki N, Arebi N, Bassett P, Saunders B. Position changes improve visibility during colonoscope withdrawal: a randomized, blinded, crossover trial. Gastrointest Endosc 2006;65(2):263-9.
- 31. Elsebaie S, El-Sabae M, Esmat M, Nasr M, Kamel M. Modified endocystectomy versus pericystectomy in echinococcus granulosus liver cysts: a randomized controlled study, and the role of specific anti-hydatid IGG4 in detection of early recurrence. J Egypt Soc Parasitol 2006;36(3):993-1006.
- Engin-Ustun Y, Ustun Y, Mutlu Meydanli M, Kafkasli A. Effects of intranasal 17 betaestradiol and raloxifene on lipid profile and fibrinogen in hypercholesterolemic postmenopausal women: a randomized, place-controlled clinical trial. Gynecol Endocrinol 2006;22(12):676-9.
- 33. *Fagnani F, Giombini A, De Cesare A, Pigozzi F, Di Salvo V. The Effects of a Whole-Body Vibration Program on Muscle Performance and Flexibility in Female Athletes. Am J Phys Med Rehabil 2006;85(12):956-62.
- 34. Farmer C, Hampson G, Abbs I, et al. Late Low-Dose Steroid Withdrawal in Renal Transplant Recipients Increases Bone Formation and Bone Mineral Density. Am J Transplant 2006;6(12):2929-36.
- 35. Federico P, Annalisa F, Guiseppe C, et al. Coagulation management in patients undergoing open heart surgery by activated clotting time and whole blood heparin concentration. Perfusion 2006;21(5):285-90.
- 36. Firooz A, Khamesipour A, Nassiri-Kashani M, et al. Imiquimod in Combination With Meglumine Antimoniate for Cutaneous Leishmaniasis. A Randomized Assessor-Blind Controlled Trial. Arch Dermatol 2006;142(12):1575-9.
- 37. Fiscella K, Eisinger S, Meldrum S, et al. Effect of mifepristone for symptomatic leiomyomata on quality of life and uterine size. Obstet Gynecol 2006;108(6):1381-7.

- 38. *Fregni F, Gimenes R, Valle A, et al. A Randomized, Sham-Controlled, Proof of Principle Study of Transcranial Direct Current Stimulation for the Treatment of Pain in Fibromyalgia. Arthritis Rheum 2006;54(12):3988-98.
- Friedmann P, Rose J, Hayaki J, et al.
 Training primary care clinicians in maintenance care for moderated alchocol use. J Gen Intern Med 2006;21(12):1269-75.
- 40. Froum S, Wallace S, Elian N, Cho S, Tarnow D. Comparison of mineralized cancellous bone allograft (Puros) and anorganic bovine bone matrix (Bio-Oss) for sinus augmentation: histomorphography at 26 to 32 weeks after grafting. Int J Periodontics Restorative Dent 2006;26(6):543-51.
- 41. Ge J, Li Y, Qian J, et al. Efficacy of emergent transcatheter transplantation of stem cells for treatment of acute myocardial infarction (TCT-STAMI). Heart 2006;92(12):1764-7.
- Gerhardt M, Gunka V, Miller R. Hemodynamic stability during labor and delivery with continous epidural infusion. J Am Osteopath Assoc 2006;106(12):692-8.
- 43. *Geyer C, Forster J, Lindquist D, et al. Lapatinib plus capecitabine for HER2-positive advanced breast cancer. N Engl J Med 2006;355(26):2733-43.
- 44. *Gigantesco A, Vittorielli M, Pioli R, et al. The VADO Approach in Psychiatric Rehabilitation: A Randomized Controlled Trial. Psychiatr Serv 2006;57(12):1778-83.
- 45. Gnant M, Luschin-Ebengreuth G,
 Kaessmann H, et al. Zoledronic Acid
 Prevents Cancer Treatment–Induced Bone
 Loss in Premenopausal Women Receiving
 Adjuvant Endocrine Therapy for HormoneResponsive Breast Cancer: A Report From
 the Austrian Breast and Colorectal Cancer
 Study Group. J Clin Oncol 2006;25(7):8208.

- 46. Goldberg R, Guyton J, Mazzone T, et al. Ezetimibe/Simvastatin vs Atorvastatin in Patients With Type 2 Diabetes Mellitus and Hypercholesterolemia: The VYTAL Study. Mayo Clin Proc 2006;81(12):1579-88.
- 47. Granacher U, Gollhofer A, Strass D. Training induced adaptations in characteristics of postural reflexes in elderly men. Gait Posture 2006;24(4):459-66.
- 48. Greenblatt D, Legangneux E, Harmatz J, et al. Dynamics and Kinetics of a Modified-Release Formulation of Zolpidem:
 Comparison With Immediate-Release
 Standard Zolpidem and Placebo. J Clin
 Pharmacol 2006;46(12):1469-80.
- Hart S, Mangoni A, Swift C, Jackson S. Lack of Significant Effects of Methionine Loading on Endothelial Function in Elderly Volunteers. Heart Lung Circ 2006;15(6):358-61.
- 50. *Hartvig P, Aulin J, Wallenberg S, Wagenius G. Physical exercise for cytotoxic drug-induced fatigue. J Oncol Pharm Pract 2006;12(4):183-91.
- 51. Hayek S, Ritchey R, Sessler D, et al. Continuous femoral nerve analgesia after unilateral total knee arthroplasty: stimulating versus nonstimulating catheters. Anesth Analg 2006;103(6):1565-70.
- 52. Hayward A, Harling R, Wetten S, et al. Effectiveness of an influenza vaccine programme for care home staff to prevent death, morbidity, and health service use among residents: cluster randomised controlled trial. BMJ 2006;333(7581):1241.
- 53. Heidari S, Saghaei M, Hashemi S, Parvazinia P. Effect of oral ketamine on the post-operative pain and analgesic requirement following orthopedic surgery. Acta Anaesthesiol Taiwan 2006;44(4):211-
- 54. Henquet C, Rosa A, Krabbendam L, et al. An experimental study of catechol-Omethyltransferase Val158Met moderation of delta-9-tetrahydrocannabinol-induced effects on psychosis and cognition. Neuropsychopharmacology 2006;31(12):2748-57.

- 55. *Hinman R, Heywood S, Day A. Aquatic Physical Therapy for Hip and Knee Osteoarthritis: Results of a Single-Blind Randomized Controlled Trial. Phys Ther 2006;87(1):32-43.
- *Hirose Y, Murosaki S, Yamamoto Y, Yoshikai Y, Tsuru T. Daily intake of heatkilled lactobacillus plantarum L-137 augments acquired immunity in healthy adults. J Nutr 2006;136(12):3069-73.
- 57. Hoybye C, Rudling M. Long-term GH treatment of GH-deficient adults:

 Comparison between one and two daily injections. J Endocrinol Invest 2006;29(11):950-6.
- 58. Hoyles R, Ellis R, Wellsbury J, et al. A Multicenter, Prospective, Randomized, Double-Blind, Placebo-Controlled Trial of Corticosteroids and Intravenous Cyclophosphamide Followed by Oral Azathioprine for the Treatment of Pulmonary Fibrosis in Scleroderma. Arthritis Rheum 2006;54(12):3962-70.
- 59. Hsu K, Zucherman J, Hartjen C, et al. Quality of life of lumbar stenosis-treated patients in whom the X STOP interspinous device was implanted. J Neurosurg Spine 2006;5(6):500-7.
- 60. Hui D, To K, Ko F. Nasal CPAP reduces systemic blood pressure in patients with obstructive sleep apnoea and mild sleepiness. Thorax 2006;61(12):1083-90.
- 61. Iribarren O, Araujo M. Effect of Antimicrobial Prophylaxis on the Incidence of Infections in Clean Surgical Wounds in Hospitals Undergoing Renovation. Infect Control Hosp Epidemiol 2006;27(12):1372-
- 62. *Iwase T, Sugiyama K. Investigation of the stability of one-piece acrylic intraocular lenses in cataract surgery and in combined vitrectomy surgery. Br J Ophthalmol 2006;90(12):1519-23.

- 63. Johnston M, Flook E, Mehta D, Mortimore S. Prospective randomised single-blind controlled trial of glacial acetic acid versus glacial acetic acid, neomycin sulphate and dexamethasone spray in otitis externa and infected mastoid cavities. Clin Otolaryngol 2006;31(6):504-7.
- 64. Kamlin O, O'Donnell C, Everest N, Davis P, Morley C. Accuracy of clinical assessment of infant heart rate in the delivery room. Resuscitation 2006;71(3):319-21.
- 65. Karaaslan D, Sivaci R, Akbulut G, Dilek O. Preemptive Analgesia in Laparoscopic Cholecystectomy: A Randomized Controlled Study. Pain Pract 2006;6(4):237-41.
- 66. Karaca P, Yurtseven N, Enc Y, et al. Effects of different cardioplegic solutions on nitric oxide release from coronary vasculature in diabetic patients undergoing coronary artery bypass surgery. Anadolu Kardiyol Derg 2006;6(4):347-51.
- 67. Karunakar M, Sen A, Bosse M, et al. Indometacin as prophylaxis for heterotopic ossification after the operative treatment of fractures of the acetabulum. J Bone Joint Surg Br 2006;88-B(12):1613-7.
- 68. Kasje W, Denig P, Stewart R, de Graeff P, Haaijer-Ruskamp F. An educational programme for peer review groups to improve treatment of chronic heart failure and diabetes mellitus type 2 in general practice. J Eval Clin Pract 2006;12(6):613-21.
- 69. Katznelson L, Robinson M, Coyle C, Lee H, Farrell C. Effects of modest testosterone supplementation and exercise for 12 weeks on body composition and quality of life in elderly men. Eur J Endocrinol 2006;155(6):867-75.
- 70. *Kemppainen T, Kokki H, Tuomilehto H, Seppa J, Nuutinen J. Acetaminophen is Highly Effective in Pain Treatment After Endoscopic Sinus Surgery. Laryngoscope 2006;116(12):2125-8.

- 71. Kenefick R, O'Moore K, Mahood N, Castellani J. Rapid IV versus oral rehydration: responses to subsequent exercise heat stress. Med Sci Sports Exerc 2006;38(12):2125-31.
- 72. Khachik F, de Moura F, Chew E, et al. The Effect of Lutein and Zeaxanthin Supplementation on Metabolites of These Carotenoids in the Serum of Persons Aged 60 or Older. Invest Ophthalmol Vis Sci 2006;47(12):5234-42.
- 73. *Kim L, Hilli L, Orlowski J, et al. Efficacy of Probiotics and Nutrients in Functional Gastrointestinal Disorders: A Preliminary Clinical Trial. Dig Dis Sci 2006;51(12):2134-44.
- 74. *King V, Kidorf M, Stoller K, et al. A 12-month controlled trial of methadone medical maintenance integrated into an adaptive treatment model. J Subst Abuse Treat 2006;31(4):385-93.
- 75. Koh T, Butow P, Coory M, et al. Provision of taped conversations with neonatologists to mothers of babies in intensive care: randomised controlled trial. BMJ 2006;334(7583):28.
- 76. *Kolak M, Yki-Ja"rvinen H, Kannisto K, et al. Effects of chronic rosiglitazone therapy on gene expression in human adipose tissue in vivo in patients with Type 2 Diabetes. J Clin Endocrinol Metab 2006;92(2):720-4.
- 77. Koo S, Cho S, Kim Y, Ham K, Hwang J. Small-Dose Ketamine Reduces the Pain of Propofol Injection. Anesth Analg 2006;103(6):1444-7.
- 78. Kornblith A, Dowell J, Herdon J, et al. Telephone Monitoring of Distress in Patients Aged 65 Years or Older With Advanced Stage Cancer. Cancer 2006;107(11):2706-14.
- 79. Kraft M, Cairns C, Ellison M, et al. Improvements in Distal Lung Function Correlate With Asthma Symptoms After Treatment With Oral Montelukast*. Chest 2006;130(6):1726-32.

- 80. Lederman M, Smeaton L, Smith K, et al. Cyclosporin A provides no sustained immunologic benefit to persons with chronic HIV-1 infection starting suppressive antiretroviral therapy: results of a randomized, controlled trial of the AIDS Clinical Trials Group A5138. J Infect Dis 2006;194(12):1677-85.
- 81. Letzel H, Megard Y, Lamarca R, Raber A, Fortea J. The efficacy and safety of aceclofenac versus placebo and naproxen in women with primary dysmenorrhoea. Eur J Obstet Gynecol Reprod Biol 2006;129(2):162-8.
- 82. *Lim Y, Teoh W, Sia A. Combined spinal epidural does not cause a higher sensory block than single shot spinal technique for casarean delivery in laboring women.

 Anesth Analg 2006;103(6):1540-2.
- 83. Lim Y, Sia A, Ho K, Teo A. Combined spinal epidural analgesia for labor with and without 3 ml of 1.5% epidural lidocaine. Med Sci Monit 2006;13(1):CR9-CR13.
- 84. Lin S, Huang C, Lin H, et al. A Modified Goal-Directed Protocol Improves Clinical Outcomes in Intensive Care Unit Patients With Septic Shock: A Randomized Controlled Trial. Shock 2006;26(6):551-7.
- 85. Liu X, Dong J, Mavrakis H, et al. Achievement of Pulmonary Vein Isolation in Patients Undergoing Circumferential Pulmonary Vein Ablation: A Randomized Comparison Between Two Different Isolation Approaches. J Cardiovasc Electrophysiol 2006;17(12):1263-70.
- 86. Loprinzi C, Kugler J, Barton D, et al. Phase III Trial of Gabapentin Alone or in Conjunction With an Antidepressant in the Management of Hot Flashes in Women Who Have Inadequate Control With an Antidepressant Alone: NCCTG N03C5. J Clin Oncol 2006;25(3):308-12.
- 87. Luanratanakorn P, Ratanapakorn T, Suwanapichon O, et al. Randomised controlled study of conjunctival autograft versus amniotic membrane graft in pterygium excision. Br J Ophthalmol 2006;90(12):1476-80.

- 88. Ludtke R, Albrecht U, Stange R, Uehleke B. Brachialgia paraesthetica nocturna can be relieved by "wet cupping"—Results of a randomised pilot study. Complement Ther Med 2006;14(4):247-53.
- 89. MacArthur R, Novak R, Peng G, et al. A comparison of three highly active antiretroviral treatment strategies consisting of non-nucleotide reverse transciptase inhibitors, protease inhibitors, or both in the presence of nucleoside reverse transcriptase inhibitors as initial therapy (CPCRA 058. Lancet 2006;368(9553):2125-35.
- 90. Magliano L, Fiorillo A, Malangone C, et al. Patient functioning and family burden in a controlled, real-world trial of family psychoeducation for schizophrenia. Psychiatr Serv 2006;57(12):1784-91.
- 91. Makrakis E, Angeli I, Agapitou K, et al. Laser versus mechanical assisted hatching: a prospective study of clinical outcomes. Fertil Steril 2006;86(6):1596-600.
- 92. Malaguarnera M, Pistone G, Astuto M, et al. Effects of l-Acetylcarnitine on Cirrhotic Patients with Hepatic Coma: Randomized Double-Blind, Placebo-Controlled Trial. Dig Dis Sci 2006;51(12):2242-7.
- 93. Manalakopoulos S, Economou M, Bethanis S, et al. A single alcohol ingestion does not affect serum hepatitis C virus RNA in patients with chronic hepatitis C. Liver Int 2006;26(10):1196-200.
- 94. Marcora S, Chester K, Mittal G, Lemmey A, Maddison P. Randomized phase 2 trial of anti-tumor necrosis factor therapy for cachexia in patients with early rheumatoid arthritis. Am J Clin Nutr 2006;84(6):1463-72.
- 95. *Marsh A, Finger E, Buzas B, et al. Impaired recognition of fear facial expressions in 5-HTTLPR S-polymorphism carriers following tryptophan depletion. Psychopharmacology (Berl) 2006;189(3):387-94.

- 96. *Martinez-Mier G, Mendez-Lopez M, Budar-Fernandez L, et al. Living related kidney transplantation without calcineurin inhibitors: initial experience in a Mexican center. Transplantation 2006;82(11):1533-6.
- 97. Martoni A, Pinto C, Di Fabio F, et al. Capecitabine plus oxaliplatin (xelox) versus protracted 5-fluorouracil venous infusion plus oxaliplatin (pvifox) as first-line treatment in advanced colorectal cancer: A GOAM phase II randomised study (FOCA trial). Eur J Cancer 2006;42(18):3161-8.
- 98. Mazzaferro V, Romito R, Schiavo M, et al. Prevention of hepatocellular carcinoma recurrence with alpha-interferon after liver resection in HCV cirrhosis. Hepatology 2006;44(6):1543-54.
- 99. *Mentzer R, Mehmet C, Sladen R, et al. Effects of perioperative nesiritide in patients with left ventricular dysfunction undergoing cardiac surgery. The NAPA trial. J Am Coll Cardiol 2007;49(6):716-26.
- 100. Middleton F, Coakes J, Umarji S, et al. The efficacy of intra-articular bupivacaine for relief of pain following arthroscopy of the ankle. J Bone Joint Surg Br 2006;88 B(12):1603-5.
- 101. *Miwa H, Osada T, Nagahara A, et al. Effect of a gastro-protective agent, rebamipide, on symptom improvement in patients with functional dyspepsia: A double-blind placebo-controlled study in Japan. J Gastroenterol Hepatol 2006;21(12):1826-31.
- 102. Montgomery M, Hakanson B, Ljungqvist O, Ahlman B, Thorell A. Twelve months' follow-up after treatment with the EndoCinch endoscopic technique for gastro-oesophageal reflux disease: A randomized, placebo-controlled study. Scand J Gastroenterol 2006;41(12):1382-9.
- 103. Moschonis G, Manios Y. Skeletal sitedependent response of bone mineral density and quantitative ultrasound parameters following a 12-month dietary intervention using dairy products fortified with calcium and vitamin D: the Postmenopausal Health Study. Br J Nutr 2006;96(6):1140-8.

- 104. Neumeister A, Carson R, Henry S, et al. Cerebral metabolic effects of intravenous glycine in healthy human subjects. J Clin Psychopharmacol 2006;26(6):595-9.
- 105. Ng K, Tsou M, Chao Y, et al. Urinary Catherization may not be necessary in minor surgey under spinal anesthesia with long actinglocal anesthetics. Acta Anaesthesiol Taiwan 2006;44(4):199-204.
- 106. Niwa H, Tanimoto A, Sugimura M, Morimoto Y, Hanamoto H. Cardiovascular effects of epinephrine under sedation with nitrous oxide, propofol, or midazolam. Oral Surg Oral Med Oral Pathol Oral Radiol Endod 2006;102(6):e1-e9.
- 107. Nohria A, Grunert M, Rikitake Y, et al. Rho Kinase Inhibition Improves Endothelial Function in Human Subjects With Coronary Artery Disease. Circ Res; 99(12):1426-32.
- 108. Odegaard S, Saether E, Steen P, Wik L. Quality of lay person CPR performance with compression: ventilation ratios 15:2, 30:2 or continuous chest compressions without ventilations on manikins. Resuscitation 2006;71(3):335-40.
- 109. Offenbacher S, Lin D, Strauss R, et al. Effects of periodontal therapy during pregnancy on periodontal status, biologic parameters, and pregnancy outcomes: a pilot study. J Periodontol 2006;77(12):2011-24.
- 110. Ohmit S, Victor J, Rotthoff J, et al. Prevention of Antigenically Drifted Influenza by Inactivated and Live Attenuated Vaccines. N Engl J Med 2006;355(24):2513-22.
- 111. *Olsen E, Hordinsky M, Whiting D, et al. The importance of dual 5a-reductase inhibition in the treatment of male pattern hair loss: Results of a randomized placebocontrolled study of dutasteride versus finasteride. J Am Acad Dermatol 2006;55(6):1014-23.
- 112. Oosterheert J, Bonten M, Schneider M, et al. Effectiveness of early switch from intravenous to oral antibiotics in severe community acquired pneumonia: multicentre randomised trial. BMJ 2006;333(7580):1193.

- 113. Orban J, Levraut J, Gindre S, et al. Effects of acetylcysteine and ischaemic preconditioning on muscular function and postoperative pain after orthopaedic surgery using a pneumatic tourniquet. Eur J Anaesthesiol 2006;23(12):1025-30.
- 114. Ottermo M, Ovstedal M, Lango T, et al. The role of tactile feedback in laparoscopic surgery. Surg Laparosc Endosc Percutan Tech 2006;16(6):390-400.
- 115. Ouyang P, Tarfif J, Herrington D, et al. Randomized trial of hormone therapy in women after coronary bypass surgery:
 Evidence of differential effect of hormone therapy on angiographic progression of disease in saphenous vein grafts and native coronary arteries. Atherosclerosis 2006;189(2):375-86.
- 116. Panici P, Plotti F, Zullo M, et al. Pelvic lymphadenectomy for cervical carcinoma: Laparotomy extraperitoneal, transperitoneal or laparoscopic approach? A randomized study. Gynecol Oncol 2006;103(3):859-64.
- 117. *Pappone C, Augello G, Sala S, et al. A Randomized Trial of Circumferential Pulmonary Vein Ablation Versus Antiarrhythmic Drug Therapy in Paroxysmal Atrial Fibrillation. J Am Coll Cardiol 2006;48(11):2340-7.
- 118. Parish L, Jorizzo J, Breton J, et al. Topical retapamulin ointment (1%, wt/wt) twice daily for 5 days versus oral cephalexin twice daily for 10 days in the treatment of secondarily infected dermatitis: Results of a randomized controlled trial. J Am Acad Dermatol 2006;55(6):1003-13.
- 119. Patkar A, Masand P, Pae C, et al. A Randomized, Double-blind, Placebocontrolled Trial of Augmentation With an Extended Release Formulation of Methylphenidate in Outpatients With Treatment-Resistant Depression. J Clin Psychopharmacol 2006;26(6):653-6.
- 120. Pelliccia F, Pasceri V, Granatelli A, et al. Safety and efficacy of short-term celecoxib before elective percutaneous coronary intervention for stable angina pectoris. Am J Cardiol 2006;98(11):1461-3.

- 121. Peng H, Xu A. Colonic exclusion and combined therapy for refractory constipation. World J Gastroenterol 2006;12(48):7864-8.
- 122. Pettigrew L, Kasner S, Gorman M, et al. Effect of arundic acid on serum S-100? in ischemic stroke. J Neurol Sci 2006;251(1-2):57-61.
- 123. *Pialoux V, Mounier R, Ponsot E, et al. Effects of exercise and training in hypoxia on antioxidant/pro-oxidant balance. Eur J Clin Nutr 2006;60(12):1345-54.
- 124. Pierce J, Clark B, Ploutz-Snyder L, Kanaley J. Growth hormone and muscle function responses to skeletal muscle ischemia. J Appl Physiol 2006;101(6):1588-95.
- 125. *Pronyk P, Hargreaves J, Kim J, et al. Effect of a structural intervention for the prevention of intimate-partner violence and HIV in rural South Africa: a cluster randomised trial. Lancet 2006;368(9551):1973-83.
- 126. Riiser A, Tjorhom A, Carlsen K. The effect of formoterol inhalation on endurance performance in hypobaric conditions. Med Sci Sports Exerc 2006;38(12):2132-7.
- 127. Robinson D, Woerner M, Napolitano B, et al. Randomized comparison of olanzapine versus risperidone for the treatment of first-episode schizophrenia: 4-month outcomes. Am J Psychiatry 2006;163(12):2096-102.
- 128. Rooke S, Malouff J. The Efficacy of Symbolic Modeling and Vicarious Reinforcement in Increasing Coping-Method Adherence. Behav Ther 2006;37(4):406-15.
- 129. *Saari T, Uvehammer J, Carlsson L, Regner L, Karrholm J. Posterior stabilized component increased femoral bone loss after total knee replacement. 5-year follow-up of 47 knees using dual energy x-ray absorptiometry. Knee 2006;13(6):435-9.

- 130. Saiki A, Ohira M, Endo K, et al. The angiotensin II receptor antagonist valsartan enhances lipoprotein lipase mass in preheparin serum in type 2 diabetes with hypertension. Diabetes Res Clin Pract 2006;74(3):242-8.
- 131. *Salvadori M, Budde K, Charpentier B, et al. FTY720 versus MMF with Cyclosporine in de novo Renal Transplantation: A 1-Year, Randomized Controlled Trial in Europe and Australasia. Am J Transplant 2006;6(12):2912-21.
- 132. Sand P, Goldberg R, Dmochowski R, McIlwain M, Dahl N. The impact of the overactive bladder syndrome on sexual function: A preliminary report from the Multicenter Assessment of Transdermal Therapy in Overactive Bladder with Oxybutynin trial. Am J Obstet Gynecol 2006;195(6):1730-5.
- 133. Sandler A, Gray R, Perry M, et al. Paclitaxel–Carboplatin Alone or with Bevacizumab for Non–Small-Cell Lung Cancer. N Engl J Med 2006;355:2542-50.
- 134. Schmittel A, Schmidt-Hieber M, Martus P, et al. A randomized phase II trial of gemcitabine plus treosulfan versus treosulfan alone in patients with metastatic uveal melanoma. Ann Oncol 2006;17(12):1826-9.
- 135. Shah H, Hedge S, Shah J, et al. A prospective, randomized trial evaluating the safety and efficacy of fibrin sealant in tubeless percutaneous nephrolithotomy. J Urol 2006;176(6 Pt 1):2488-92.
- 136. Shim J, Choi Y, Oh Y, et al. Effect of oral sildenafil citrate on intraoperative hemodynamics in patients with pulmonary hypertension undergoing valvular heart surgery. J Thorac Cardiovasc Surg 2006;132(6):1420-5.
- 137. Shiver S, Blaivas M, Lyon M. A Prospective Comparison of Ultrasoundguided and Blindly Placed Radial Arterial Catheters. Acad Emerg Med 2006;13(12):1275-9.

- 138. Simons L, Amansec S, Conway P. Effect of Lactobacillus fermentum on serum lipids in subjects with elevated serum cholesterol. Nutr Metab Cardiovasc Dis 2006;16(8):531-5.
- 139. Sipe C, Davis W, Maifeld M, van Voorhis B. A prospective randomized trial comparing anastrozole and clomiphene citrate in an ovulation induction protocol using gonadotropins. Fertil Steril 2006;86(6):1676-81.
- 140. Sprigg N, Bath P, Zhao L, et al. Patients With Subacute Ischemic Stroke: The Stem Cell Trial of Recovery Granulocyte-Colony-Stimulating Factor Mobilizes Bone Marrow Stem Cells in Patients With Subacute Ischemic Stroke: The Stem Cell Trial of Recovery EnhanceMent After Stroke (STEMS) Pilot Randomized, Controlled Trial. Stroke 2006;37(12):2979-83.
- 141. *Steinkruger G, Nusstein J, Reader A, Beck M, Weaver J. The significance of needle bevel orientation in achieving a successful inferior alveolar nerve block. J Am Dent Assoc 2006;137(12):1685-91.
- 142. Tamer C, Oksuz H. Circadian intraocular pressure control with dorzolamide versus timolol maleate add-on treatments in primary open-angle glaucoma patients using latanoprost. Ophthalmic Res 2006;39(1):24-31.
- 143. Tan K, Sng K, Tay K, Lai J, Eu K. Randomized clinical trial of 0·2 per cent glyceryl trinitrate ointment for wound healing and pain reduction after open diathermy haemorrhoidectomy. Br J Surg 2006;93(12):1464-8.
- 144. Thorburn M, Vistisen B, Thorp R, et al. Attenuated gastric distress but no benefit to performance with adaptation to octanoaterich esterified oils in well-trained male cyclists. J Appl Physiol 2006;101(6):1733-43.
- 145. Uebelacker L, Beevers C, Battle C, et al. Family Functioning in Bipolar I Disorder. J Fam Psychol 2006;20(4):701-4.

- 146. Ullenhang G, Spendlove I, Watson N, et al. A Neoadjuvant/Adjuvant RandomizedTrial of Colorectal Cancer PatientsVaccinated with an Anti-Idiotypic Antibody, 105AD7, Mimicking CD55. Clin Cancer Res 2006;12(24):7389-96.
- 147. Umemura T, Ueda K, Nishioka K, et al. Effects of Acute Administration of Caffeine on Vascular Function. Am J Cardiol 2006;98(11):1538-41.
- 148. Unlugenc H, Ozalevli M, Gunes Y, et al. A double-blind comparison of intrathecal S(+) ketamine and fentanyl combined with bupivacaine 0.5% for Caesarean delivery. Eur J Anaesthesiol 2006;23(12):1018-24.
- 149. van den Berg M, Ronday H, Peeters A, et al. Using Internet Technology to Deliver a Home-Based Physical Activity Intervention for Patients With Rheumatoid Arthritis: A Randomized Controlled Trial. Arthritis Rheum 2006;55(6):935-45.
- 150. van Osterhout M, Sont J, Bajema I, Breedveld F, van Laar J. Comparison of Efficacy of Arthroscopic Lavage Plus Administration of Corticosteroids, Arthroscopic Lavage Plus Administration of Placebo, and Joint Aspiration Plus Administration of Corticosteroids in Arthritis of the Knee: A Randomized Controlled Trial. Arthritis Rheum 2006;55(6):964-70.
- 151. Van K, Hides J, Richardson C. The Use of Real-Time Ultrasound Imaging for Biofeedback of Lumbar Multifidus Muscle Contraction in Healthy Subjects. J Orthop Sports Phys Ther 2006;36(12):920-5.
- 152. Vas J, Perea-Milla E, Mendez C, et al. Efficacy and safety of acupuncture for chronic uncomplicated neck pain: a randomised controlled study. Pain 2006;126(1-3):245-55.
- 153. *Vassallo B, Culpepper C, Segal J, Moen M, Noone M. A randomized trial comparing methods of vaginal cuff closure at vaginal hysterectomy and the effect on vaginal length. Am J Obstet Gynecol 2006;195(6):1805-8.

- 154. Vertigan A, Theodoros D, Gibson P, et al. Efficacy of speech pathology management for chronic cough: a randomized placebo controlled trial of treatment efficacy. Thorax 2006;61(12):1065-9.
- 155. Vollmer W, Kirschner M, Peters D, et al. Use and Impact of an Automated Telephone Outreach System for Asthma in a Managed Care Setting. Am J Manag Care 2006;12(12):725-33.
- 156. Wang G, Li T, Wang L, et al. Tong-xiening, a Chinese herbal formula, in treatment of diarrhea-predominant irritable bowel syndrome: a prospective, randomized, double-blind, placebo-controlled trial. Chin Med J 2006;119(24):2114-9.
- 157. Wang S, Hu Z, Li S, Huang X, Ye C. Effect of external valvuloplasty of the deep vein in the treatment of chronic venous insufficiency of the lower extremity. J Vasc Surg 2006;44(6):1296-300.
- 158. Watson A, El-Deredy W, Bentley D, Vogt B, Jones A. Categories of placebo response in the absence of site-specific expectation of analgesia. Pain 2006;126(1-3):115-22.
- 159. Webster L, Butera P, Moran L, et al.
 Oxytrex Minimizes Physical Dependence
 While Providing Effective Analgesia: A
 Randomized Controlled Trial in Low Back
 Pain. J Pain 2006;7(12):937-46.
- 160. Weiss J, Shavin J, Nighland M, Grossman R. Tretinoin microsphere gel 0.1% for photodamaged facial skin: a placebocontrolled trial. Cutis 2006;78(6):426-32.
- 161. Wiggers L, Smets E, Oort F, et al. The effect of a minimal intervention strategy in addition to nicotine replacement therapy to support smoking cessation in cardiovascular outpatients: a randomized clinical trial. Eur J Cardiovasc Prev Rehabil 2006;13(6):931-7.
- 162. Yu D, Murdoch S, Parikh S, et al.
 Rosiglitazone increases LDL particle size and buoyancy and decreases C-reactive protein in patients with type 2 diabetes on statin therapy. Diab Vasc Dis Res 2006;3(3):189-96.

Appendix C. Guidelines for Risk of Bias Assessments

This table was taken from the Cochrane Handbook of Reviews of Effectiveness of Interventions (Table 8.5.c (modified): Criteria for judging risk of bias in the 'Risk of bias' assessment tool). The last column was added to provide decision rules specific to this project.

	GENERATION	anna Adamirata anni
generation?) Criteria for a judgement of 'YES' (i.e. low risk of bias).	 Referring to a random number table; Using a computer random number generator; Coin tossing; Shuffling cards or envelopes; Throwing dice; Drawing of lots; Minimization*. 	The investigators describe the use of stratification or permuted blocking (use of computer implied).
	*Minimization may be implemented without a random element, and this is considered to be equivalent to being random.	
Criteria for the judgement of 'NO' (i.e. high risk of bias).	The investigators describe a non-random component in the sequence generation process. Usually, the description would involve some systematic, non-random approach, for example:	
	 Sequence generated by odd or even date of birth; 	
	 Sequence generated by some rule based on date (or day) of admission; 	
	 Sequence generated by some rule based on hospital or clinic record number. 	
	Other non-random approaches happen much less frequently than the systematic approaches mentioned above and tend to be obvious. They usually involve judgement or some method of non-random categorization of participants, for example: • Allocation by judgement of the	

	clinician;	
	 Allocation by preference of the participant; 	
	 Allocation based on the results of a laboratory test or a series of tests; 	
	 Allocation by availability of the intervention. 	
Criteria for the judgement of 'UNCLEAR' (uncertain risk of bias).	Insufficient information about the sequence generation process to permit judgement of 'Yes' or 'No'.	Description only includes 'random', 'randomly generated', 'randomized', etc.

ALLOCATIO	N CONCEALMENT	
Was allocation ac	dequately concealed? (Short form: Allocation	concealment?)
'YES' (i.e. low risk	Participants and investigators enrolling participants could not foresee assignment because one of the following, or an equivalent method, was used to conceal allocation:	
	 Central allocation (including telephone, web-based and pharmacy- controlled randomization); 	
	 Sequentially numbered drug containers of identical appearance; 	
	 Sequentially numbered, opaque, sealed envelopes. 	
	Participants or investigators enrolling participants could possibly foresee assignments and thus introduce selection bias, such as allocation based on:	
	 Using an open random allocation schedule (e.g. a list of random numbers); 	
	 Assignment envelopes were used without appropriate safeguards (e.g. if envelopes were unsealed or non- opaque or not sequentially numbered); 	
	 Alternation or rotation; 	
	Date of birth;	
	 Case record number; 	
	 Any other explicitly unconcealed procedure. 	
judgement of 'UNCLEAR' (uncertain risk of bias).	Insufficient information to permit judgement of 'Yes' or 'No'. This is usually the case if the method of concealment is not described or not described in sufficient detail to allow a definite judgement – for example if the use of assignment envelopes is described, but it remains unclear whether envelopes were sequentially numbered, opaque and sealed.	

BLINDING OF PARTICIPANTS, PERSONNEL AND OUTCOME ASSESSORS

Was knowledge of the allocated interventions adequately prevented during the study? (Short form: Blinding?)

Assess this domain based on the pre-determined primary outcome

^^Assess this domain based on the pre-determined primary outcome^^		
Criteria for a judgement of 'YES' (i.e. low risk of bias).	 Any one of the following: No blinding, but the review authors judge that the outcome and the outcome measurement are not likely to be influenced by lack of blinding; 	Investigators describe the use of a matched placebo or discuss how placebos were similar in some way (e.g., appearance, taste, etc.)
	 Blinding of participants and key study personnel ensured, and unlikely that the blinding could have been broken; 	
	 Either participants or some key study personnel were not blinded, but outcome assessment was blinded and the non-blinding of others unlikely to introduce bias. 	
Criteria for the	Any one of the following:	
judgement of 'NO' (i.e. high risk of bias).	 No blinding or incomplete blinding, and the outcome or outcome measurement is likely to be influenced by lack of blinding; 	
	 Blinding of key study participants and personnel attempted, but likely that the blinding could have been broken; 	
	 Either participants or some key study personnel were not blinded, and the non-blinding of others likely to introduce bias. 	
	Any one of the following:	Study is only described as 'double-blind'
judgement of 'UNCLEAR' (uncertain risk of	 Insufficient information to permit judgement of 'Yes' or 'No'; 	or 'placebo-controlled'.
bias).	 The study did not address this outcome. 	

INCOMPLETE OUTCOME DATA

Were incomplete outcome data adequately addressed? (Short form: *Incomplete outcome data addressed*?)

Criteria for a judgement of 'YES' (i.e. low risk of bias).

Any one of the following:

- No missing outcome data;
- Reasons for missing outcome data unlikely to be related to true outcome (for survival data, censoring unlikely to be introducing bias);
- Missing outcome data balanced in numbers across intervention groups, with similar reasons for missing data across groups;
- For dichotomous outcome data, the proportion of missing outcomes compared with observed event risk not enough to have a clinically relevant impact on the intervention effect estimate:
- For continuous outcome data, plausible effect size (difference in means or standardized difference in means) among missing outcomes not enough to have a clinically relevant impact on observed effect size;
- Missing data have been imputed using appropriate methods.

Any one of the following:

- ≥90%* of enrolled patients are included in the analysis AND withdrawals and reasons for withdrawals are balanced between groups and appear unrelated to outcome;
- A true intention-to-treat analysis was conducted.

'90% is used as a guideline.

Criteria for the judgement of 'NO' (i.e. high risk of bias).

Any one of the following:

- Reason for missing outcome data likely to be related to true outcome, with either imbalance in numbers or reasons for missing data across intervention groups;
- For dichotomous outcome data, the proportion of missing outcomes compared with observed event risk enough to induce clinically relevant bias in intervention effect estimate;
- For continuous outcome data, plausible effect size (difference in means or standardized difference in means) among missing outcomes enough to induce clinically relevant bias in observed effect size:
- 'As-treated' analysis done with substantial departure of the

Any one of the following:

- <90%* of enrolled patients are included in the analysis;
- Substantial proportion of patients withdrew from the study, even if they are included in an ITT analysis.

90% is used as a guideline.

	 intervention received from that assigned at randomization; Potentially inappropriate application of simple imputation. 	
Criteria for the judgement of 'UNCLEAR' (uncertain risk of bias).	 Any one of the following: Insufficient reporting of attrition/exclusions to permit judgement of 'Yes' or 'No' (e.g. number randomized not stated, no reasons for missing data provided); The study did not address this outcome. 	

SELECTIVE OUTCOME REPORTING

Are reports of the study free of suggestion of selective outcome reporting? (Short form: Free of selective reporting?)

Assess this do	**Assess this domain based on ALL study outcomes			
Criteria for a	Any of the following:	Outcomes described in the Methods		
judgement of 'YES' (i.e. low risk of bias).	 The study protocol is available and all of the study's pre-specified (primary and secondary) outcomes that are of interest in the review have been reported in the pre- specified way; 	section are reported on in the Results section.		
	 The study protocol is not available but it is clear that the published reports include all expected outcomes, including those that were pre-specified (convincing text of this nature may be uncommon). 			
Criteria for the	Any one of the following:			
judgement of 'NO' (i.e. high risk of bias).	 Not all of the study's pre-specified primary outcomes have been reported; 			
	 One or more primary outcomes is reported using measurements, analysis methods or subsets of the data (e.g. subscales) that were not pre-specified; 			
	 One or more reported primary outcomes were not pre-specified (unless clear justification for their reporting is provided, such as an unexpected adverse effect); 			
	One or more outcomes of interest			

	in the review are reported incompletely so that they cannot be entered in a meta-analysis;	
	The study report fails to include results for a key outcome that would be expected to have been reported for such a study.	
judgement of	Insufficient information to permit judgement of 'Yes' or 'No'. It is likely that the majority of studies will fall into this category.	

OTHER POTENTIAL THREATS TO VALIDITY

Was the study apparently free of other problems that could put it at a risk of bias? (Short form: Free of other bias?)

Assess this domain based on: design-specific risks of bias; early stopping for benefit; severe baseline imbalances; inappropriate influence of funders (a full list and other potential biases are provided in Section 8.14.1.6 of the Cochrane Handbook). Record any other potential sources that you feel may compromise the internal validity of a given study.

Criteria for a judgement of 'YES' (i.e. low risk of bias).	The study appears to be free of other sources of bias.	 With respect to "inappropriate influence of study sponsors", any one of the following: The study received no funding; The study was only funded by non-industry (e.g., government); The study declares the source of funding and the role of the sponsor (i.e., specifies that sponsor was removed from the conduct of the study).
Criteria for the judgement of 'NO' (i.e. high risk of bias).	 There is at least one important risk of bias. For example, the study: Had a potential source of bias related to the specific study design used; or Stopped early due to some datadependent process (including a formal-stopping rule); or Had extreme baseline imbalance; or Has been claimed to have been fraudulent; or Had some other problem. 	 With respect to "inappropriate influence of study sponsors", any one of the following: One or more of the authors are industry employees or are receiving speaking grants; The sponsor is directly involved in the conduct of the trial.
Criteria for the judgement of	There may be a risk of bias, but there is	With respect to "inappropriate influence of

'UNCLEAR' ei (uncertain risk of bias).	either:	study sponsors", any one of the following:
	 Insufficient information to assess whether an important risk of bias exists; or 	 There is no mention of the funding source; Industry funding is declared with
	 Insufficient rationale or evidence that an identified problem will introduce bias. 	no description of role in the study.

Appendix D. Variables for Data Extraction from Randomized Controlled Trials

VALIDITY OF RISK OF BIAS: DATA EXTRACTION GUIDE		
Field	Response	Comments
Publication characteristics		
Please enter the following publication characteristics:		
RefID		
Publication title:		
Publication year:		
Citation:		
Full journal title:		
First author:		
Country of corresponding author:		
Number of authors:		
Was there a working group?	□Yes	
	□No	
Type of journal:	□General medical journal	
T	□Specialty medical journal	
Impact factor:		
RefID		
PubTitle		
PubDate		
Citation		
Journal		
LeadAuthor		
GeoLocation		
NumAuthors		
Trial characteristics		
What is the study design?	□RCT parallel	RCT parallel: A trial that compares two groups of
	□RCT crossover	people concurrently, one of which receives the
	□RCT factorial	intervention of interest and one of which is a control
	□RCT split body	group . Some parallel trials have more than two
		comparison groups and some compare different

		interventions without including a non-intervention control group. (Also called independent group design.) RCT crossover : A type of clinical trial comparing two or more interventions in which the participants , upon completion of the course of one treatment, are switched to another. For example, for a comparison of treatments A and B, the participants are randomly allocated to receive them in either the order A, B or the order B, A. Particularly appropriate for study of treatment options for relatively stable health problems. The time during which the first intervention is taken is known as the first period, with the second intervention being taken
Based on the study hypothesis/objectives, which study type is described by the authors? In your opinion, what study type is consistent with the	□Efficacy/Superiority □Equivalence □Non-inferiority □Not declared □None of the above □Unclear	during the second period. Efficacy/Superiority: A study in which the authors intended to demonstrate a statistically significant difference between treatments. Equivalence: A study in which the authors intended to show that there was no statistically significant difference between treatments. Non-inferiority: A study in which the authors intended to show that the new treatment effect is not worse than the standard treatment effect. I.e., in your opinion, is the study type consistent with
methods described? What is the unit of randomization?	□Equivalence □Non-inferiority □None of the above □Unclear □Individual	what the authors have classified it as? Cluster RCTs could include randomization of
what is the unit of randomization?	□Individual □Cluster	classrooms or schools, practices or hospitals, etc.
What is the nature of the intervention?	□Behavioral/Psychological □Device □Drug □Natural health product □Surgical □Vaccine □Other	Natural health products include: -Vitamins and minerals -Herbal remedies -Homeopathic medicines -Traditional medicines such as traditional Chinese medicines -Probiotics, and -Other products like amino acids and essential fatty acids. (http://www.hc-sc.gc.ca/dhp-mps/prodnatur/index-

		eng.php) A device is "an instrument, apparatus, implement, machine, contrivance, implant, in vitro reagent, or other similar or related article, including a component part, or accessory which is: -recognized in the official National Formulary, or the United States Pharmacopoeia, or any supplement to them, -intended for use in the diagnosis of disease or other conditions, or in the cure, mitigation, treatment, or prevention of disease, in man or other animals, or -intended to affect the structure or any function of the body of man or other animals, and which does not achieve any of it's primary intended purposes through chemical action within or on the body of man or other animals and which is not dependent upon being metabolized for the achievement of any of its primary
		intended purposes." (http://www.fda.gov/CDRH/DEVADVICE/312.html)
What is the intervention type?	□Pharmacological □Nonpharmacological	Pharmacological includes drugs, natural health products, vaccines Non-pharmacological includes behavioural/educational, devices, surgical
Was the treatment mode a:	□Flexible dose □Fixed dose □Unclear □N/A	
What intervention(s) are tested?		Specify the intervention(s) evaluated in the trial
Is the study placebo controlled?	□Yes □No □Unclear	
How many arms does the study have?		
Is the study multicenter?	□Yes □No □Unclear	
If yes, how many study sites are involved?		
Is the study multinational?	□One country □Multinational	
What is the enrolled sample size?		
Is a sample size calculation reported?	□Yes	

	□No	
What is the primary/secondary diagnostic category	☐ Acute Respiratory Infections	
involved in the study?	□ Airways	
	□ Anaesthesia	
	□ Back	
	☐ Bone, Joint and Muscle Trauma	
	□ Breast Cancer	
	□ Colorectal Cancer	
	□ Consumers and Communication	
	☐ Cystic Fibrosis and Genetic Disorders	
	☐ Dementia and Cognitive Improvement	
	☐ Depression, Anxiety and Neurosis	
	☐ Developmental, Psychosocial and	
	Learning Problems	
	□ Drugs and Alcohol	
	☐ Ear, Nose and Throat Disorders	
	☐ Effective Practice and Organisation of	
	Care	
	□ Epilepsy	
	☐ Eyes and Vision	
	☐ Fertility Regulation	
	☐ Gynaecological Cancer	
	□ HIV/AIDS	
	☐ Haematological Malignancies	
	□ Heart	
	☐ Hepato-Biliary	
	□ Hypertension	
	□ Incontinence	
	□ Infectious Diseases	
	☐ Inflammatory Bowel Disease and	
	Functional Bowel Disorders	
	□ Injuries	
	□ Lung Cancer	
	☐ Menstrual Disorders and Subfertility	
	☐ Metabolic and Endocrine Disorders	
	☐ Movement Disorders	
	□ Multiple Sclerosis	

	□ Musculoskeletal	
	□ Neuromuscular Disease	
	☐ Occupational Safety and Health	
	□ Oral Health	
	☐ Pain, Palliative and Supportive Care	
	☐ Peripheral Vascular Diseases	
	☐ Pregnancy and Childbirth	
	☐ Prostatic Diseases and Urologic Cancers	
	_	
	☐ Public Health	
	□ Renal	
	□ Schizophrenia	
	☐ Sexually Transmitted Diseases	
	□ Skin	
	□ Stroke	
	□ Tobacco Addiction	
	☐ Upper Gastrointestinal and Pancreatic	
	Diseases	
	□ Wounds	
	□ Other	
Specify condition being treated:		
What was the treatment duration?		
What is the funding source?	□Industry	
	□Government	
	□Academic	
	□Foundation	
	□No funding	
	□Other	
	□Not declared	
Specify source of funding:		
Outcomes and conclusions		
Primary outcome:		
Is the primary outcome:	□Objective	Objective outcomes include all cause mortality,
	□Subjective	measures based on a recognized laboratory procedure,
		surgical or instrumental outcomes and other objective
		measures.
		Subjective outcomes include patient reported outcomes,
		physician assessed disease outcomes, measures
		combined from several outcomes, and withdrawals or

		study dropouts.
		(Wood et al. BMJ 2008;336:601-605.)
Source of outcome assessment:	□ Administrative data	
	□ Automated data	
	□ Clinician's assessment	
	□ Laboratory measure	
	□ Self-report	
	□ Other	
What is the effect estimate of the primary outcome?		

Appendix E. Meta-Analyses and Cohort Studies used for NOS Assessments

EPC Systematic Reviews:

Ip S, Chung M, Raman G, Chew P, Magula N, DeVine D, Trikalinos T, Lau J. *Breastfeeding and maternal and infant health outcomes in developed countries*. Evidence Report/Technology Assessment No. 153 (Prepared by Tufts-New England Medical Center Evidence-based Practice Center, under Contract No. 290-02-0022). AHRQ Publication No. 07-E007. Rockville, MD: Agency for Healthcare Research and Quality. April 2007.

- 1. Burgess S, Dakin C, O'Callaghan M. Breastfeeding does not increase the risk of asthma at 14 years. Pediatrics 2006;117(4):e787-92.
- Fergusson D, Horwood L, Shannon F. Risk factors in childhood eczema. J Epidemiol Commun Health 1982;36:118-2.
- 3. Gordon R, Nobel DQ, Ward AM, Allen R. Immunoglobulin E and the eczema-asthma syndrome in early childhood. Lancet 1982;1:72-4.
- Gruskay F. Comparison of breast, cow and soy feedings in the prevention of onset of allergic disease: a 15-year prospective study. Clin Pediatr 1982;21(8):546-50.
- 5. Hide D, Guyer B. Clinical manifestations of allergy related to breast and cows' milk feeding. Arch Dis Child 1981;56:172-5.

- 6. Kull I, Almqvist C, Lilja G. Breast-feeding reduces the risk of asthma during the first 4 years of life. J Allergy Clin Immunol 2004;114(4):755-60.
- 7. Oddy W, Holt P, Sly P, et al. Association between breast feeding and asthma in 6 year old children: findings of a prospective birth cohort. BMJ 1993;319:815-9.
- 8. Tariqu S, Matthews S, Hakim E, et al. The prevalence of and risk factors for atopy in early childhood: a whole population birth cohort study. J Allergy Clin Immunol 1998;101:587-93.
- 9. Wilson A, Forsyth J, Greene S, et al. Relation of infant diet to childhood health: seven year follow up of cohort of children in Dundee infant feeding study. BMJ 1998;316:21-5.
- 10. Wright A, Holberg C, Taussig L, Martinez F. Factors influencing the relation of infant feeding to asthma and recurrent wheeze in childhood. Thorax 2001;56(3):192-7.

McAlister FA, Ezekowitz J, Dryden DM, Hooton N, Vandermeer B, Friesen C, Spooner C, Rowe BH. *Cardiac resynchronization therapy and implantable cardiac defibrillators in left ventricular systolic dysfunction*. Evidence Report/Technology Assessment No. 152 (Prepared by the University of Alberta Evidence-based Practice Center under Contract No. 290-02-0023). AHRQ Publication No. 07-E009. Rockville, MD: Agency for Healthcare Research and Quality. June 2007.

- 1. Bokhari F, Newman D, Greene M, et al. Long-term comparison of the implantable cardioveter defibrillator versus amiodarone: eleven-year follow-up of a subset of patients in the Canadian Implantable Defibrillator Study (CIDS). Circulation 2004;110(2):112-6.
- Buxton AE, Lee KL, Fisher JD, et al. A randomized study of the prevention of sudden death in patients with coronary artery disease. Multicenter Unsustained Tachycardia Trial Investigators. N Engl J Med 1999;341(25):1882-90.

- 3. Chan P, Hayward R. Mortality reduction by implantable cardioveter-defibrillators in highrisk patients with heart failure, ischemic heart disease, and new-onset ventricular arrhythmia: an effectiveness study. J Am Coll Cardiol 2005;45(9):1474-81.
- 4. Chan P, Chow T, Kereiakes D, et al. Effectiveness of implantable cardioconverter defibrillators in patients with ischemic heart disease and left ventricular dysfunction. Arch Intern Med 2006;166(20):2228-33.
- Ermis C, Zadeii G, Zhu A, et al. Improved survival of cardiac transplantation candidates with implantable cardioverter defibrillator therapy: role of beta-blocker or aminodarone treatment. J Cardiovasc Electrophysiol 2003;14(6):578-83.
- Ermis C, Lurie K, Zhu A, et al. Biventricular implantable cardioverter defibrillators improve survival compared with biventricular pacing alone in patients with severe left ventricular dysfunction. J Cardiovasc Electrophysiol 2004;15(8):862-6.
- Gaita F, Bocchiardo M, Porciani M, et al. Should stimulation therapy for congestive heart failure be combined with defibrillation backup? Am J Cardiol 2000;86(9A):165K-8K.

- Pappone C, Vicedomini G, Augello G, et al. Combining electrical therapies for advanced heart failure: the Milan experience with biventricular pacing-defibrillation backup combination for primary prevention of sudden cardiac death. Am J Cardiol 2003;91(9A):74F-80F.
- 9. Raviele A, Bongiorni M, Brignole M, et al. Early EPS/ICD strategy in survivors of acute myocardial infarction with severe left ventricular dysfunction on optimal betablocker treatment. The Beta-blocker Strategy plus ICD trial. Europace 2005;7(4):327-37.
- Saba S, Atiga W, Barrington W, et al. Selected patients listed for cardiac transplantation may benefit from defibrillator implantation regardless of an established indication. J Heart Lung Transplant 2003;22(4):411-18.
- 11. Sanchez JM, Katsiyiannis WT, Gage BF, et al. Implantable cardioverter-defibrillator therapy improves long-term survival in patients with unexplained syncope, cardiomyopathy, and a negative electrophysiologic study. Heart Rhythm 2005;2(4):367-73.

Santaguida PL, Balion C, Hunt D, Morrison K, Gerstein H, Raina P, Booker L, Yazdi H. *Diagnosis, prognosis, and treatment of impaired glucose tolerance and impaired fasting glucose*. Evidence Report/Technology Assessment No. 128. (Prepared by the McMaster University Evidence-based Practice Center under Contract No. 290-02-0020). AHRQ Pub. No 05-E026-2. Rockville, MD: Agency for Healthcare Research and Quality. September 2005.

- 1. Ammari F, Batieha A, Jaddou P, Okashi M, Ajlouni K. A natural history of impaired glucose tolerance in North Jordan. Pracit Diabet Int 1998;15(5):139-40.
- 2. Charles M, Eschwege E, Thibult N, et al. The role of non-esterfied fatty acids in the deterioration of glucose tolerance in Caucasian subjects: results of the Pairs Prospective Study. Diabetologia 1997;40(9):1101-6.
- 3. Chou P, Li C, Wu G, Tsai S. Progression to type 2 diabetes among high-risk groups in Kin-Chen Kinmen. Exploring the natural history of type 2 diabetes. Diabet Care 1988;21(7):1183-7.
- 4. de Vegt F, Dekker J, Jager A, et al. Relation of impaired fasting and postload glucose with incident type 2 diabetes in a Dutch population: The Hoorn Study. JAMA 2001;285(16):2109-13.

- 5. Ferrannini E, Nannipieti M, Williams K, et al. Mode of onset of type 2 diabetes from normal or impaired glucose tolerance. Diabetes 2004;53(1):160-5.
- Haffner S, Miettinen H, Gaskill S, Stern M.
 Decreased insulin secretion and increased
 insulin resistance are independently related to
 the 7-year risk of NIDDM in Mexican Americans. Diabetes 1995;44(12):1386-91.
- Inoue I, Takahashi K, Katayama S, et al. A
 higher proinsulin response to glucose loading
 predicts deteriorating fasting plasma glucose
 and worsening to diabetes in subjects with
 impaired glucose tolerance. Diabet Med
 1996;13(4):330-6.
- 8. Kahn S, Leonetti D, Prigeon R, et al. Proinsulin levels predict the development of non-insulin-dependent diabetes mellitus (NIDDM) in Japanese-American men. Diabet Med 1996;13(9 Suppl 6):S63-6.
- 9. King H, Zimmet P, Raper L, Balkau B. The natural history of impaired glucose tolerance in the Micronesian population of Nauru: a sixyear follow-up study. Diabetologia 1984;26(1):39-43.
- Ko G, Chan J, Tsang L, Cockram C.
 Combined use of fasting plasma glucose and
 HbA1c predicts the progression to diabetes in
 Chinese subjects. Diabet Care
 2000;21(7):1770-3.
- 11. Mykkanen L, Kuusisto J, Pyorala K, Laakso M. Cardiovascular disease risk factors as predictors of type 2 (non-insulindependent) diabetes mellitus in elderly subjects. Diabetologia 1993;36(6):553-9.

- 12. Norman R, Masters L, Milner C, Wang J, Davies M. Relative risk of conversion from normoglycaemia to impaired glucose tolerance or non-insulin dependent diabetes mellitus in polycystic ovarian syndrome. Hum Reprod 2001;16(9):1995-98.
- 13. Puavilai G, Tiewtranon V, Pensuwan S, et al. Impaired glucose tolerance in Thai adults: status of glucose tolerance after 2-year follow up. J Med Assoc Thai 1987;7(Suppl 2):68-76.
- 14. Saad M, Knowler W, Pettitt D, Nelson R, Bennett P. Transient impaired glucose tolerance in Pima Indians: is it important? BMJ 1988;297(6661):1438-41.
- 15. Schranz A. Abnormal glucose tolerance in the Maltese. A population-based longitudinal study of the natural history of NIDDM and IGT in Malta. Diabetes Res Clin Pract 1989;7(1):7-16.
- 16. Wat N, Lam T, Janus E, Lam K. Central obesity predicts the worsening of glycemia in southern Chinese. Int J Obes Relat Metabl Disord 2001;25(12):1789-93.
- 17. Wong M, Gu K, Heng D, et al. The Singapore impaired glucose tolerance follow-up study: does the ticking clock go backward as well as forward? Diabet Care 2003;26(11):3024-30.

Non-EPC Systematic Reviews

Alexander DD, Mink PJ, Cushing CA, Sceurman B. A review and meta-analysis of prospective studies of red and processed meat intake and prostate cancer. Nutrition Journal 2010:9:50.

- 1. Allen N, Key T, Appleby P, et al. Animal foods, protein, calcium and prostate cancer risk: the European Prospective Investigation into Cancer and Nutrition. Brit J Cancer 2008;98(9):1574-81.
- Allen N, Sauvaget N, Roddam A, et al. A
 propsective study of diet and prostate cancer in
 Japanese men. Cancer Causes Control
 2011;15(9):911-20.

- 3. Chan J, Pietinen P, Virtanen M, et al. Diet and prostate cancer risk in a cohort of smokers, with a specific focus on calcium and phosphorus (Finland). Cancer Causes Control 2000;11(9):859-67.
- 4. Cross A, Peters U, Kirsch V, et al. A prospective study of meat and meat mutagens and prostate cancer risk. Cancer Res 2005;65(24):11779-84.
- 5. Cross A, Leitzmann M, Gail M, et al. A prospective study of red and processed meat intake in relation to cancer risk. PLoS Med 2007;4(12):1973-84.
- 6. Gann P, Hennekens C, Sacks F, et al. Propsective study of plasma fatty acids and risk of prostate cancer. J Natl Cancer Institute 1994;86(4):281-6.
- 7. Hsing A, McLaughlin J, Schuman L, et al. Diet, tobacco use, and fatal prostate cancer: results from the Lutheran Brotherhood Cohort Study. Cancer Res 1990;50(2 1):6836-40.
- 8. Koutros S, Cross A, Sandler D, et al. Meat and meat mutagens and risk of prostate cancer in the Agricultural Health Study. Cancer Epidemiol Biomarkers Prev 2008;17(1):80-7.
- 9. LeMarchand L, Kolonel L, Wilkens L, Myers B, Hirohata T. Animal fat consumption and prostate cancer: a prospective study in Hawaii. Epidemiology 1994;5(3):276-82.

- 10. Michaud D, Augustsson K, Rimm E, et al. A prospective study on intake of animal products and risk of prostate cancer. Cancer Causes Control 2001;12(6):557-67.
- 11. Mills P, Beeson W, Phillips R, Fraser G. Cohort study of diet, lifestyle, and prostate cancer in Adventist men. Cancer 1989;64(3):598-604.
- 12. Park S, Murphy S, Wilkens L, Henderson B, Kolonel L. Fat and meat intake and prostate cancer risk: the multiethnic cohort study. Int J Cancer 2007;121(6):1339-45.
- 13. Rodriquez C, McCullough M, Mondul A, et al. Meat consumption among Black and White men and risk of prostate cancer in the Cancer Prevention Study II Nutrition Cohort. Cancer Epidemiol Biomarkers Prev 2006;15(2):211-16.
- 14. Rohrmann S, Platz E, Kavanaugh C, et al. Meat and dairy consumption and subsequent risk of prostate cancer in a US cohort study. Cancer Causes Control; 18(1):41-50.
- 15. Schuurmann A, van den Brandt P, Dorant E, Goldbohm R. Animal products, calcium and prostate cancer risk in The Netherlands Cohort Study. Br J Cancer 1999;80(7):1107-13.

Grote NK, Bridge JA, Gavin AR, Melville JL, Iyengar S, Katon WJ. A meta-analysis of depression during pregnancy and the risk of preterm birth, low birth weight and intrauterine growth restriction. Arch Gen Psychiatry 2010;76(10):1012-24.

- Andersson L, Sundstrom-Poromaa I, Wulff M, Astrom M, Bixo M. Neonatal outcome following maternal antenatal depression and anxiety: a population-based study. Am J Epidemiol 2004;159(9):872-81.
- 2. Copper R, Goldenberg R, Das A, et al. The preterm prediction study: maternal stress is associated with spontaneous preterm birth at less than thirty-five weeks' gestation. Am J Obstet Gynecol 1996;175(5):1286-92.
- 3. Dayan J, Creveuil C, Marks M, et al. Prenatal depression, prenatal anxiety, and spontaneous preterm birth: a prospective cohort study among women with early and regular care. Pyschosom Med 2006;68(6):938-46.
- 4. Dayan J, Creveuil C, Herlicoviez M, et al. [Antenatal depression, a risk factor for prenatal delivery]. Presse Med 1999;28(31):1698.

- 5. Diego M, Field T, Hernandez-Reif M, et al. Prenatal depression restricts fetal growth. Early Hum Dev 2009;85(1):65-70.
- 6. Dole N, Savitz D, Hert-Picciotto I, et al. Maternal stress and preterm birth. Am J Epidemiol 2003;157(1):14-24.
- 7. Gavin A, Holzman C, Siefert K, Tian Y. Maternal depressive symptoms, depression, and psychiatric medication use in relation to risk of preterm delivery. Women's Health Issues 2009;16(5):325-34.
- 8. Hass J, Fuentes-Afflick ESA, Jackson R, et al. Prepregnancy health status and the risk of preterm delivery. Arch Pediatr Adolesc 2005;159(1):58-63.
- 9. Hedegaard M, Henriksen T, Sabroe S, Secher N. Psychological distress in pregnancy and preterm delivery. BMJ 1993;307(6898):234-39.
- 10. Hoffman S, Hatch M. Depressive symptomatology during pregnancy: evidence for an association with decreased fetal growth in pregnancies of lower social class women. Health Psychol 2000;19(6):535-43.
- 11. Jesse D, Seaver W, Wallace D. Maternal psychosocial risks predict preterm birth in a group of women from Appalachia. Midwifery 2003;19(3):191-202.
- 12. Li D, Liu L, Odouli R. Presence of depressive symptoms during early pregnancy and the risk of preterm delivery: a prospective cohort study. Hum Reprod 2009;24(1):146-53.
- 13. Neggers Y, Goldenberg R, Cliver S, Hauth J. The relationship between psychosocial profile, health practices, and pregnancy outcomes. Acta Obstet Gynecol Scand 2006;85(3):277-85.

- 14. Nordentoft M, Lou H, Hansen D, et al. Intrauterine growth retardation and premature delivery: the influence of maternal smoking and pyschosocial factors. Am J Pub Health 1996;86(3):347-54.
- 15. Orr S, James S, Blackmore Prince C. Maternal prenatal depressive symptoms and spontaneous preterm births among African-American women in Baltimore, Maryland. Am J Epidemiol 2002;156(9):797-802.
- 16. Perkin M, Bland J, Peacock J, Anderson H. The effect of anxiety and depression during pregnancy on obstetric complications. Br J Obstet Gynaecol 1993;100(7):629-34.
- 17. Rondo P, Ferreira R, Nogueira F, et al. Maternal psychological stress and distress as predictors of low birth weight, prematurity and intrautering growth retardation. Eur J Clin Nutr 2003;57(2):266-72.
- 18. Steer R, Scholl T, Hediger M, Fischer R. Selfreported depression and negative pregnancy outcomes. J Clin Epidemiol 1992;45(10):1092-99.
- 19. Suri R, Altshuler L, Hellemann G, et al. Effects of antenatal depression and antidepressant treatment on gestational age at birth and risk of preterm birth. Am J Psychiatry 2007;164(8):1206-13.
- 20. Wisner KL, Sit DK, Hanusa BH, et al. Major depression and antidepressant treatment: impact on pregnancy and neonatal outcomes. Am J Psychiatry 2009;166(5):557-66.

Jacobson KR, Tierney DB, Jeon CY, Mitnick CD, Murray MB. *Treatment outcomes among patients with extensively drug-resistant tuberculosis: systematic review and meta-analysis*. Clin Infect Disease 2010: 51(1):6-14.

- 1. Bamerjee R, Allen J, Westenhouse J, et al. Extensively drug-resistant tuberculosis in California, 1993-2006. Clin Infect Dis 2008;47:450-7.
- 2. Blaas S, Mutterlein R, Weig J, et al. Extensively drug resistant tuberculosis in a high income country: a report of four unrelated cases. BMC Infect Dis 2008;8:60-7.

- 3. Chan E, Strand M, Iseman M. Multidrugresistant tuberculosis (TB) resistant to fluoroquinolones and streptomycin but susceptible to second-line injection therapy has a better prognosis than extensively drugresistent TB. Clin Infect Dis 2009;48:e50-2.
- 4. Condos R, Hadgiangelis N, Leibert E, et al. Case series report of a linezolid-containing regimen for extensively drug-resistant tuberculosis. Chest 2008;134:187-92.
- 5. Eker B, Ortmann J, Migliori G, et al. Multidrug- and extensively drug-resistant tuberculosis, Germany. Emerg Infect Dis 2008:14:1700-06.
- Joen D, Kim D, Kang H, et al. Survival and predictions of outcomes in non-HIV-infected patients with extensively drug-resistant tuberculosis. Int J Tuberc Lung 2009;13:594-600.
- 7. Kershavjee S, Gelmanova I, Mishustin S, et al. Treatment of extensively drug-resistant tuberculosis in Tomsk, Russia: a retrospective cohort study. Lancet 2008;372:1403-9.
- 8. Kim D, Kim H, Park S, et al. Treatment outcomes and long-term survival in patients with extensively drug-resistant tuberculosis. Am J Respir Crit Care 2008;178:1075-82.

- 9. Kim H, Hwang S, Kim H, et al. Impact of extensive drug resistance on treatment outcomes in non-HIV-infected patients with multidrug-resistant tuberculosis. Clin Infect Dis 2007;45:1290-5.
- 10. Kliiman K, Altaja A. Predictors of poor treatment outcome in highly drug-resistant pulmonary tuberculosis. Eur Respir 2009;33:1085-97.
- 11. Kwon Y, Kim Y, Suh G, et al. Treatment outcomes for HIV-uninfected patients with multidrug-resistant and extensively drugresistant tuberculosis. Clin Infect Dis 2008;47:496-502.
- 12. Mitnick C, Shin S, Seung K, et al. Comprehensive treatment of extensively drugresistant tuberculosis. N Engl J Med 2008;359:563-74.
- 13. Shah N, Pratt R, Armstrong L, et al. Extensively drug-resistant tuberculosis in the United States, 1993-2007. JAMA 2008;300:2153-60.

Janda S, Young A, Fitzgerald JM, Etminan M, Swiston J. *The effect of statins on mortality from severe infections and sepsis: a systematic review and meta-analysis.* J Crit Care 2010:25:656.e7-656.e22.

- 1. Almog Y, Novack V, Eisinger M, et al. The effect of statin therapy on infection-related mortality in patients with atherosclerotic diseases. Crit Care Med 2007;35:372-8.
- 2. Chalmers J, Singanayagam A, Murray M, Hill A. Prior statin use is associated with improved outcomes in community-acquired pneumonia. Am J Med 2008;121:1002-1007; e1001.
- 3. Dobesh P, Klepser D, McGuire T, Morgan C, Olsen K. Reduction in mortality associated with statin therapy in patients with severe sepsis. Pharmacotherapy 2009;29:621-30.

- 4. Donnino M, Cocchi M, Howell M, et al. Statin therapy is associated with decreased mortality in patients with infection. Acad Emerg Med 2009;16:230-4.
- 5. Fernandez R, De Pedro V, Artigas A. Statin therapy prior to ICU admission: protection against infection or a severity marker? Intensive Care Med 2006;32:160-4.
- 6. Frost FJ, Petersen H, Tollestrup K, et al. Influenza and COPD mortality protection as pleiotropic, dose-dependent effects of statins. Chest 2007;131(4):1006-12.

- 7. Hackam D, Mamdani M, Li P, Redelmeier D. Statin therapy prior to ICU admission: protection against infection or a severity marker? Lancet 2006;367:413-8.
- Hsu J, Andes D, Knasinski V, Pirsch J, Safdar N. Statins are associated with improved outcomes of bloodstream infection in solidorgan transplant recipients. Eur J Clin Microbiol Infect Dis 2009;28:1343-51.
- 9. Kruger P, Fitzsimmons K, Cook D, Jones M, Nimmo G. Statin therapy is associated with fewer deaths in patients with bacteraemia. Intensive Care Med 2006;32:75-9.
- 10. Liappis A, Kan V, Rochester C, Simon G. The effect of statins on mortality in patients with bacteremia. Clin Infect Dis 2001;33:1352-7.
- 11. Majumdar S, McAlister F, Eurich D, Padwal R, Marrie T. Statins and outcomes in patients admitted to hospital with community acquired pneumonia: population based prospective cohort study. BMJ 2006;333:999.
- 12. Martin C, Talbert R, Burgess D, Peters J. Effectiveness of statins in reducing the rate of sever sepsis: a retrospective evaluation. Pharmacotherapy 2007;27:20-6.
- 13. Mortensen E, Restrepo M, Anzueto A, Pugh J. The effect of prior statin use on 30-day mortality for patients with hospitalized with community-acquired pneumonia. Respir Res 2005;6:82.
- 14. Mortensen E, Restrepo M, Copeland L, et al. Impact of previous statin and angiotensin II receptor blocker use on mortality in patients hospitalized with sepsis. Pharmacotherapy 2007;27:1619-26.

- 15. Mortensen E, Pugh M, Copeland L, et al. Impact of statins and angiotensin-converting enzyme inhibitors on mortality of subjects hospitalized with pneumonia. Eur Respir 2008;31:611-7.
- 16. Schlienger R, Fedson D, Jick S, Jick H, Meier C. Statins and the risk of pneumonia: a population-based, nested case-control study. Pharmacotherapy 2007;27:325-32.
- 17. Thomsen R, Hundborg H, Johnsen S, et al. Statin use and mortality within 180 days after bacteremia: a population-based cohort study. Crit Care Med 2006;34:1080-6.
- 18. Thomsen R, Riis A, Kornum J, et al.
 Preadmission use of statins and outcomes after hospitalization with pneumonia: population-based cohort study of 29.900 patients. Arch Intern Med 2008;168:2081-7.
- 19. Tseng MY, Hutchinson PJ, Czosnyka M, et al. Effects of acute pravastatin treatment on intensity of rescue therapy, length of inpatient stay, and 6-month outcome in patients after aneurysmal subarachnoid hemorrhage. Stroke 2007;38(5):1545-50.
- 20. Yang K, Chien J, Tseng W, et al. Statins do not improve short-arm survival in an oriental population with sepsis. Am J Emerg Med 2007;25:494-501.

McDonald SD, Han Z, Mulla S, Beyene J. Overweight and obesity in mothers and risk of preterm birth and low birth weight infants: systematic review and meta-analysis. BMJ: 2010;341:c3428.

- 1. Adams M, Sarno A, Harlass F, Rawlings J, Read J. Risk factors for preterm delivery in a healthy cohort. Epidemiology 1995;6(5):525-32.
- 2. Ancel P, Saurel-Cubizolles M, Di Renzo G, Papiernik E, Breart G. Very and moderate preterm births: are the risk factors different? Br J Obstet Gynaecol 1999;106:1162-70.

- 3. Baeten J, Bukusi E, Lambe M. Pregnancy complications and outcomes among overweight and obese nulliparious women. Am J Pub Health 2001;91:436-40.
- 4. Barros H, Tavares M, Rodrigues T. Role of prenatal care in preterm birth and low birthweight in Portugal. J Public Health Med 1996;18(3):321-8.
- 5. Berkowitz G, Blackmore Prince C, Lapinski R, Savitz D. Risk factors for preterm birth subtypes. Epidemiology 1998;9(3):279-85.
- Bhattacharya S, Campbell D, Liston A, Bhattacharya S. Effect of body mass index on pregnancy outcomes in nulliparous women. BMC Public Health 2007;7:168.
- 7. Bianco A, Smilen S, Davis Y, et al. Pregnancy outcome and weight gain recommendations for the morbidly obese woman. Obstet Gynecol 1998;91(1):97-102.
- 8. Bondevik G, Lie R, Ulstein M, Kvale G. Maternal hematological status and risk of low birth weight and preterm delivery in Nepal. Acta Obstet Gynecol Scand 2001;80:402-8.
- 9. Callaway L, Prins J, Chang A, McIntyre H. The prevalence and impact of overweight and obesity in an Australian obstetric population. MJA 2006:184:56-9.
- Clausen T, Oyen N, Henriksen T. Pregnancy complications by overweight and residential area. A prospective study of an urban Norwegian cohort. Acta Obstet Gynecol Scand 2006;85:526-33.
- 11. De B, Lin S, Lohsoonthorn V, Williams M. Risk of preterm delivery in relation to maternal low birth weight. Acta Obstet Gynecol Scand 2007;86:565-71.
- 12. Dietz P, Callaghan W, Cogswell M, et al. Combined effects of prepregnancy body mass index and weight gain during pregnancy on the risk for preterm delivery. Epidemiology 2006;17:170-7.
- 13. Druil L, Cacciaguerra G, Citossi A, et al. Prepregnancy body mass index and adverse pregnancy outcomes. Arch Gynecol Obstet 2008;278:23-6.

- 14. Gardosi J, Francis A. Early pregnancy predictors of preterm birth: the role of a prolonged menstruation-conception interval. BJOG 2000;107(2):228-37.
- 15. Gilboa S, Correa A, Alverson C. Use of spline regression in an analysis of maternal prepregnancy body mass index and adverse birth outcomes: does it tell us more than we already know? Ann Epidemiol 2008;18:196-205.
- Goldenberg R, Iams J, Mercer B, et al. The preterm prediction study: the value of new vs standard risk factors in predicting early and all spontaneous preterm births. NICHD MFMU Network. Am J Pub Health 1998;88:233-8.
- 17. Haas J, Fuentes-Afflick E, Stewart A, et al. Prepregnancy health status and the risk of preterm delivery. Arch Pediatr Adolesc 2005;159:59-63.
- 18. Hauger M, Gibbons L, Vik T, Belizan J. Prepregnancy weight status and the risk of adverse pregnancy outcome. Acta Obstet Gynecol Scand 2008;87:953-9.
- 19. Hendler I, Goldenberg R, Mercer B, et al. The Preterm Prediction Study: association between maternal body mass index and spontaneous and indicated preterm birth. Am J Obstet Gynecol 2005;192:882-6.
- 20. Hickey C, Cliver S, McNeal S, Goldenberg R. Low pregravid body mass index as a risk factor for preterm birth: variation by ethnic group. Obstet Gynecol 1997;89:206-12.
- 21. Jensen D, Damm P, Sorensen B, et al.
 Pregnancy outcome and prepregnancy body
 mass index in 2459 glucose-tolerant Danish
 women. Am J Obstet Gynecol 2003;189:23944.
- 22. Kim Y, Lee B, Park H. Risk factors for preterm birth in Korea: a multicenter prospective study. Gynecol Obstet Invest 2005;60:206-12.
- 23. Leung T, Leung T, Sahota D, et al. Trends in maternal obesity and associated risks of adverse pregnancy outcomes in a population of Chinese women. BJOG 2008;115:1529-37.

- 24. Lumme R, Paua R. Pre-pregnancy weight and its relation to pregnancy outcome. J Obstet Gynaecol 1995;15:69-75.
- 25. Merlino A, Laffineuse L, Collin M, Mercer B. Impact of weight loss between pregnancies on recurrent preterm birth. Am J Obstet Gynecol 2006;195:818-21.
- Monaghan S, Little R, Hulchiy O, Strassner H, Gladen B. Risk factors for spontaneous preterm birth in two urban areas of Ukraine. Paediatr Perinat Epidemiol 2001;15:123-30.
- 27. Nohr E, Bech H, Vaeth M, et al. Obesity, gestational weight gain and preterm birth: a study within the Danish National Birth Cohort. Paediatr Perinat Epidemiol 2007;21:5-14.
- 28. Rahaman J, Narayansingh GV, Roopnarinesingh S. Fetal outcome among obese parturients. Int J Gynaecol Obstet 1990;31(3):227-30.
- 29. Ray J, Vermeulen M, Shapiro J, Kenshole A. Maternal and neonatal outcomes in pregestational and gestational diabetes mellitus, and the influence of maternal obesity and weight gain: the DEPOSIT study: Diabetes Endocrine Pregnancy Outcome Study in Toronto. Q J Med 2001;94:347-56.
- 30. Ronnenberg A, Wang X, Xing H, et al. Low preconception body mass index is associated with birth outcome in a prospective cohort of Chinese women. J Nutr 2003;133:3449-55.
- 31. Sahu M, Agarwal A, Das V, Pandey A. Impact of maternal body mass index on obstetric outcome. J Obstet Gynaecol 2007;33:655-9.
- 32. Savitz D, Dole N, Herring A, et al. Should spontaneous and medically indicated preterm births be separated for studying aetiology. Paediatr Perinat Epidemiol 2005;19:97-105.
- 33. Scholl T, Hediger M, Salmon R, Belsky D, Ances I. Influence of prepregnant body mass and weight gain for gestation on spontaneous preterm delivery and duration of gestation during adolescent pregnancy. Am J Hum Biol 1989;1:657-64.

- 34. Sebire N, Jolly M, Harris J, et al. Maternal obesity and pregnancy outcome a study of 287,213 pregnancies in London. Int J Obes Relat Metabl Disord 2001;25:1175-82.
- 35. Siega-Riz A, Adair L, Hobel C. Maternal underweight status and inadequate rate of weight gain during the third trimester of pregnancy increases the risk of preterm delivery. J Nutr 1996;126:146-53.
- 36. Smith G, Shah I, Pell J, Crossley J, Dobbie R. Maternal obesity in early pregnancy and risk of spontaneous and elective preterm deliveries: a retrospective cohort study. Am J Pub Health 2007;97:157-62.
- 37. Yekta Z, Ayatollah H, Porali R, Farzin A. The effect of pre-pregnancy body mass index and gestational weight gain on pregnancy outcomes in urban care settings in Irma-Iran. BMC Pregnancy Childbirth 2006;6:15.
- 38. Yogev Y, Langer O, Xenakis E, Rosenn B. The association between glucose challenge test, obesity and pregnancy outcome in 6390 non-diabetic women. J Matern Fetal Neonatal Med 2005;17:29-34.

Appendix F. Decision Rules for Application of the Newcastle-Ottawa Scale

The following coding instructions are taken from the Newcastle-Ottawa Scale website, available here: http://www.ohri.ca/programs/clinical_epidemiology/oxford.asp. Text in italics indicates additional guidance for reviewers agreed upon during the initial training teleconference.

CODING MANUAL FOR COHORT STUDIES

SELECTION

1) Representativeness of the exposed cohort

Item is assessing the representativeness of exposed individuals in the community, not the representativeness of the sample of women from some general population. For example, subjects derived from groups likely to contain middle class, better educated, health oriented women are likely to be representative of postmenopausal estrogen users while they are not representative of all women (e.g. members of a health maintenance organisation (HMO) will be a representative sample of estrogen users. While the HMO may have an under-representation of ethnic groups, the poor, and poorly educated, these excluded groups are not the predominant users of estrogen).

- a) truly representative of the average in the community*
- b) somewhat representative of the average in the community*
- c) selected group of users e.g. nurses, volunteers
- d) no description of the derivation of the cohort

2) Selection of the non-exposed cohort

- a) drawn from the same community as the exposed cohort*
- b) drawn from a different source*
- c) no description of the derivation of the non-exposed cohort

3) Ascertainment of exposure

- a) secure record (e.g. surgical records, medical records)*
- b) structured interview*
- c) written self report

4) Demonstration that outcome of interest was not present at start of study

In the case of mortality studies, outcome of interest is still the presence of a disease/incident, rather than death. That is to say that a statement of no history of disease or incident earns a star.

- a) yes*
- b) no

COMPARABILITY

1) Comparability of cohorts on the basis of the design or analysis

A maximum of 2 stars can be allotted in this category

Either exposed and non-exposed individuals must be matched in the design and/or confounders must be adjusted for in the analysis. Statements of no differences between groups or that differences were not statistically significant are not sufficient for establishing comparability.

Note: If the relative risk for the exposure of interest is adjusted for the confounders listed, then the groups will be considered to be comparable on each variable used in the adjustment.

There may be multiple ratings for this item for different categories of exposure (e.g. ever vs. never, current vs. previous or never)

Please see the accompanying background sheet to determine what confounders are considered important for each review topic.

If the outcome/condition of interest is gender-specific (i.e. depression in pregnancy), only evaluate 'a' on whether or not the researchers controlled for age.

- a) study controls for <u>age/sex</u> (the most important factor)*
- b) study controls for any additional factor*

OUTCOME

1) Assessment of outcome

For some outcomes (e.g. fractured hip), reference to the medical record is sufficient to satisfy the requirement for confirmation of the fracture. This would not be adequate for vertebral fracture outcomes where reference to x-rays would be required.

- a) independent or blind assessment stated in the paper, or confirmation of the outcome by reference to secure records (x-rays, medical records, etc.)*
- b) record linkage (e.g. identified through ICD codes on database records)*
- c) self-report (i.e. no reference to original medical records or x-rays to confirm the outcome)
- d) no description.

2) Was follow-up long enough for outcomes to occur

Please see the accompanying background sheet to determine what the minimum required followup period is for each review topic.

- a) yes*
- b) no

If the follow-up period is reported with a mean and a range, and the mean is longer than the required minimum, rate it as 'yes.'

3) Adequacy of follow-up of cohorts

This item assesses the follow-up of the exposed and non-exposed cohorts to ensure that losses are not related to either the exposure or the outcome.

- a) complete follow-up, all subjects accounted for*
- b) subjects lost to follow-up are unlikely to introduce bias small number lost <20%
- c) follow-up rate <80% and no description of those lost
- d) no description or unclear

If follow-up rates vary by outcome, use the outcome included in the meta-analysis of the systematic review the article is included in.

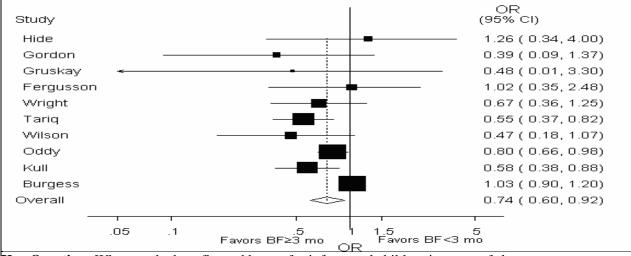
If <20% of subjects were lost to follow-up, but the difference between groups is large consider downgrading to 'c,' especially if no reasons for difference in follow-up are provided.

Appendix G. Supplementary Information for NOS Assessments

Additional background information provided to study participants to assist in making quality assessments. Information was based on the initial systematic reviews, or where necessary, expert opinion.

Breastfeeding and Maternal and Infant Health Outcomes in Developed Countries (AHRQ Report Number 153)

Source: Figure 9. Meta-analysis of prospective cohort studies of the association between asthma risk and breastfeeding ≥ 3 months for children without family history of asthma or atopy (page 46)



Key Question: What are the benefits and harms for infants and children in terms of short-term outcomes, such as infectious diseases (including otitis media, diarrhea, and lower respiratory tract infections), sudden infant death syndrome and infant mortality, and longer-term outcomes such as cognitive development, childhood cancer (including leukemia), type 1 and 2 diabetes, asthma, atopic dermatitis, cardiovascular disease (including hypertension), hyperlipidemia, and obesity, compared among those who mostly breastfeed, mostly formula feed, and mixed feed; and how are these outcomes associated with duration of the type of feeding? Do the harms and benefits differ for any specific subpopulations based on socio-demographic factors?

Primary Outcome:

-risk of developing asthma

Population:

-healthy term infants in developed countries; preterm infants in developed countries (for NEC and cognitive development); healthy mothers in developed countries

Comparability:

-maternal age

-socioeconomic status, parental smoking, [family history of atopy]

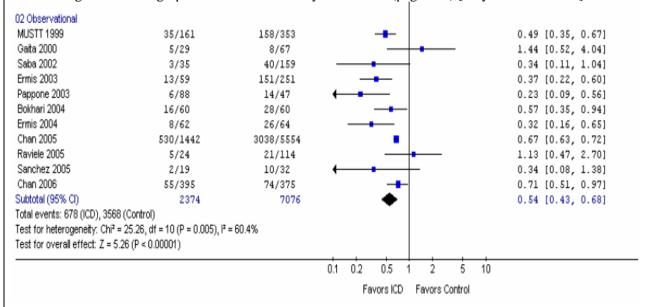
Followup

-minimum duration of followup: 5 years (60 months)

Adequacy of followup:

Cardiac Resynchronization Therapy and Implantable Cardiac Defibrillators in Left Ventricular Systolic Dysfunction (AHRQ Report Number 152)





Key Question: In adult patients with symptomatic or asymptomatic left ventricular (LV) systolic dysfunction, what is the efficacy and effectiveness of cardiac resynchronization therapy (CRT) alone, implantable cardiac defibrillators (ICD) alone, or combined CRT-ICD devices compared to usual medical therapy? What is the efficacy and effectiveness of single-chamber ICD compared to that of dual-chamber ICD? How safe is CRT alone, ICD alone, or combined CRT-ICD devices? Which patients would benefit from ICD alone, CRT alone, or combined CRT-ICD devices?

Primary Outcome:

-all cause mortality

Population:

- -patients with asymptomatic LV systolic dysfunction or symptomatic heart failure (HF) and left ventricular ejection fraction (LVEF) $\leq 35\%$
- -since the implantation procedure can only be performed in specialized centers, review authors determined that all facilities were representative of patients in usual practice

Comparability:

-NYHA class

-age, sex, race, etiology of heart failure (e.g., ischemic), LVEF, QRS width, rhythm (normal sinus rhythm, atrial fibrillation), medication use

Followup:

-minimum duration of followup: 1 year (12 months)

Adequacy of followup:

Diagnosis, Prognosis, and Treatment of Impaired Glucose Tolerance and Impaired Fasting Glucose (AHRQ Report Number 128)

Source: Figure 6. Meta-analysis of annualized RR for progression to DM in IGT group (page 47)

Test for heterogeneity: Q = 37.66 on 16 d.f. (p = 0.002) Pooled estimate = 6.0202 (s.e. 0.6954) (p < 0.0001), 95 % confidence interval (CI) 4.6573 to 7.3831

ma is the	N	N	Annual	C.I.							
Study	IGT	NGT	RR	95%	RR(95% C	D					
King, 1984	13/51	14/215	4.29	(2.04,9.04)	1-1	_	_				
Puavili, 1987	8/49	1/22	3.71	(0.48,28.75)	+						
Saad, 1988	118/384	25/752	10.33	(6.75,15.82)		77					
Schranz, 1989	23/75	54/1252	8.09	(5.01,13.06)		_		_			
Charles, 1991	25/464	23/4102	9.77	(5.56.17.16)		_	_				
Mykkanen, 1993	48/203	21/689	8.43	(5.08,13.97)		· -	-	_			
Haffner, 1995	55/125	44/589	7.21	(4.88,10.65)	100	_	—				
Inoue, 1996	5/37	1/22	3.06	(0.37,25.51)	+						
Kabn, 1996	12/38	4/49	4.33	(1.42.13.21)				-			
Ammari, 1998	10/68	10/144	2.16	(0.92,5.07)	-	-					
Chou, 1998	23/131	16/350	4.05	(2.16,7.61)	_	_					
Ko, 2000	19/39	25/169	3.58	(2.12, 6.06)	-	-	10000				
De Vegt, 2001	36/111	46/1231	10.01	(6.52.15.39)	1	-	_				
Norman, 2001	7/13	4/54	9.50	(2.84,31.78)	-	-	_				
Wat, 2001	31/322	4/322	7.92	(2.81,22.31)	-	_			_		
Wong, 2003	102/291	12/278	9.55	(5.26,17.32)		_	_				
Ferrannini, 2004 Total	62/151 597/2552	101/1198 605/11438	5.82 6.02	(4.27, 7.94) (4.66, 7.38)		→					
						<u> </u>	-1	-	-	-	_
					0	5	10	15	20	25	30
					RR						
					7.570						

Key Question: What is the relationship between IFG and IGT? For those individuals identified with impaired fasting glucose (IFG) or impaired glucose tolerance (IGT), what are the short- and long-term risks for developing negative health outcomes? Does this risk vary by subpopulation, such as sex, race, obesity, age, or other such risk factors as blood pressure or elevated lipid levels?

Primary Outcome:

progression from IFG or IGT to diabetes mellitus

Population:

-pt with IFG or IGT (cutoff criteria varies)

Comparability:

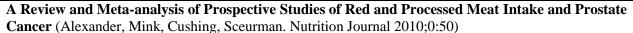
- age, sex

-blood pressure, elevated lipid levels

Followup:

-minimum duration of followup: 3 years (36 months)

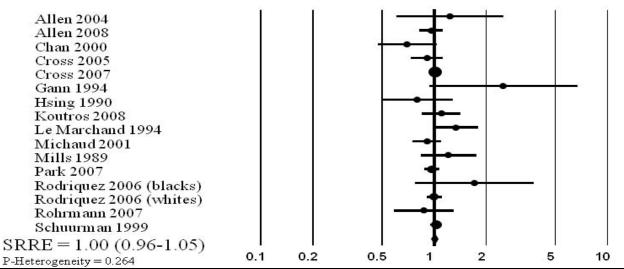
Adequacy of followup:



Source: Figure 1. Meta-analysis of prospective studies of red meat intake and prostate cancer (page 12)

Author & Year

RR and 95% CI



Objective/Aim: To estimate the summary associations between red or processed meat intake and prostate cancer; evaluate associations among men with advanced disease; estimate dose-response trends; evaluate potential sources of heterogeneity; assess the potential for publication bias?

Primary outcome:

-occurrence of prostate cancer

Participants:

-men only

Comparability:

-age, race

-energy intake, smoking, family history of cancer

Followup:

-minimum duration of followup: 5 years (60 months)

Adequacy of followup:

A Meta-analysis of Depression During Pregnancy and the Risk of Preterm Birth, Low Birth Weight and Intrauterine Grown Restriction (Grote, Bridge, Gavin, Melville, Iyengar and Katon. Arch Gen Psychiatry 2010;67(10):1012-24)

Source: Table 2. Effect of antenatal depression on outcomes of PTB, LBW, and IUGR (p. 1016). (exclude Suri and Wisner—Case Series)

Table 2. Effect of Antenatal Depression on Outcomes of PTB, LBW, and IUGR

				Heterogeneity		
Outcome	No. of Studies	Relative Risk (95% CI) ^a	<i>P</i> Value	Q _{df} Within	<i>P</i> Value	Variance Explained, %
PTB	20	1.13 (1.06-1.21)	<.001	49.019	<.001	61
LBW	11	1.18 (1.07-1.30)	.001	33.810	<.001	70
IUGR	12	1.03 (0.99-1.08)	.14	22.411	.02	51

Abbreviations: CI, confidence interval; IUGR, intrauterine growth restriction; LBW, low birth weight; PTB, preterm birth.
^a Pooled effect size was estimated using the random-effects model.

Objectives/Aims: To estimate the risk of preterm birth (PTB), low birth weight (LBW), and intrauterine growth restriction (IUGR) associated with antenatal depression

Primary outcome:

-preterm birth (PTB was defined as birth prior to 37 weeks' gestation)

Participants:

-pregnant women only

Comparability:

- -maternal age
- -smoking/substance abuse, race/ethnicity or SES, previous pre-term birth, SSRI antidepressant use, educational level, marital status

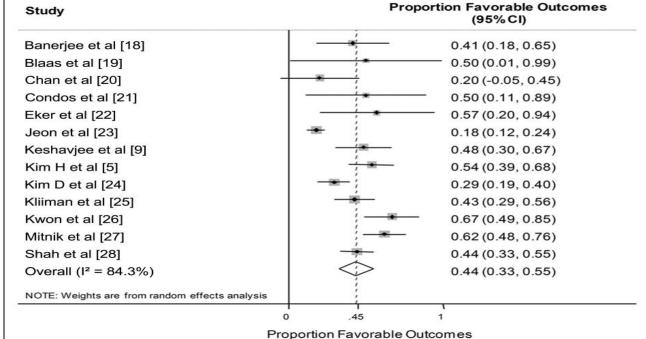
Followup:

-Not applicable (outcomes [preterm birth/birth weight] are obtained as soon as birth occurs)

Adequacy of followup:

Treatment Outcomes among Patients with Extensively Drug-Resistant Tuberculosis: Systematic Review and Meta-Analysis (Jacobson, Tierney, Jeon, Mitnick and Murray. Clinical Infectious Diseases 2010;51(1):6-14)

Source: Figure 2. Weighted proportion of favorable outcomes for the selected studies (page 11)



Objective/Aim: To assess extensively drug-resistant (XDR) tuberculosis treatment outcomes and to identify therapeutic approaches associated with favorable outcomes

Primary outcome:

-number of patients with favorable outcomes [Favorable outcomes as defined by WHO—Cure: treatment completion plus at least 5 consecutive negative cultures during the last year of treatment; Treatment completion: treatment completion but <5 cultures performed in the last year of treatment]

Participants:

-confirmed XDR TB by drug susceptibility testing of M. tuberculosis cultures

Comparability:

-age

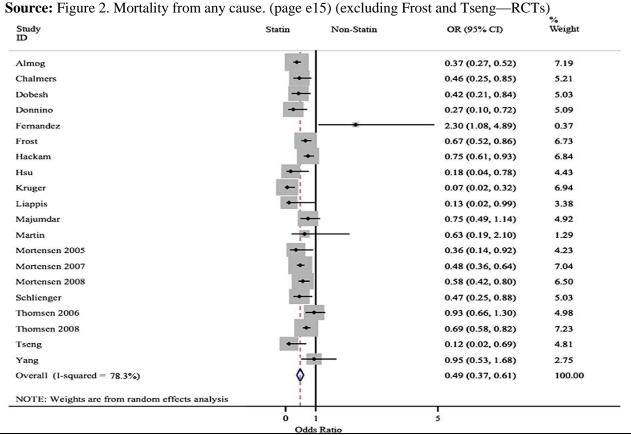
-HIV prevalence among patients with XDR TB receiving treatment; sex; number of drugs in treatment regimens; number of "likely active drugs" in a treatment regimen; percentage of patients who received a latergeneration fluoroquinolone; percentage of patients who received linezolid; percentage of patients who underwent surgery

Followup:

-minimum duration of followup: 1 year (12 months)

Adequacy of followup:

The effect of statins on mortality from severe infections and sepsis: A systematic review and metaanalysis (Janda, Young, FitzGerald, Etminan, Swiston. Journal of Critical Care 2010;25:656e7—656e22)



Objective/Aim: The aim of this study was to systematically review the literature on the effect of statins on mortality in patients with infection and/or sepsis

Primary outcome:

-mortality (all cause)

Participants:

- -both adult and pediatric patients
- -included sepsis or various infections: bacteremia, pneumonia, HIV, hepatitis B, C, and A, and cytomegalovirous

Comparability:

- -age
- -sex, severity of disease, co-morbidities, history of illness, medication use

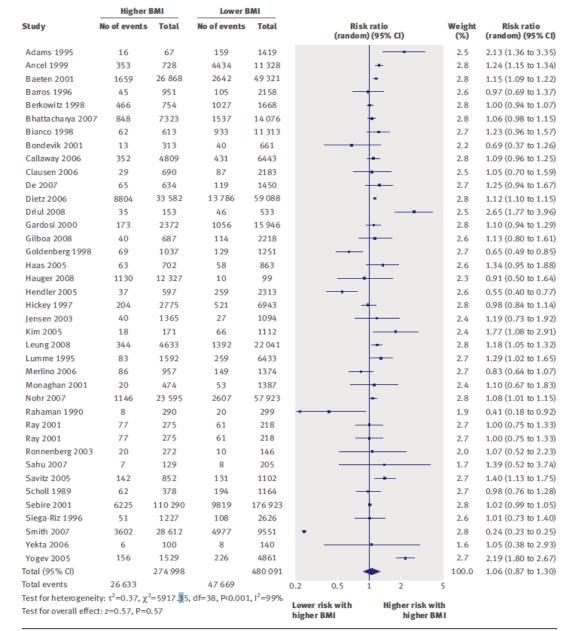
<u>Followup:</u>

-minimum duration of followup: 30 days

Adequacy of followup:

Overweight and Obesity in Mothers and Risk of Preterm Birth and Low Birth Weight Infants: Systematic Review and Meta-Analyses (McDonald, Han, Mulla, and Beyene. BMJ 2010;341:c3428).

Source: Figure 2. Forest plot of risk of preterm birth before 37 weeks in overweight and obese women compared with women of normal weight in cohort studies (page 7)



 $\label{eq:fig2} \textbf{Fig2} \mid \textbf{Forest plot of risk of preterm birth before 37 weeks in overweight and obese women compared with women of normal weight in cohort studies. \\ \textbf{BMI=body mass index}$

Objectives/Aims: To determine the relation between overweight and obesity in mothers and preterm birth and low birth weight in singleton pregnancies in developed and developing countries.

Primary outcome:

-preterm birth (<37 weeks gestation)

Participants:

-pregnant women with singleton pregnancies only

Comparability:

-age

-race, parity, smoking, marital status, education, socio-economic status, co-morbidities (e.g., diabetes, pre-eclampsia, gestatitional diabetes)

Followup:

-Not applicable (outcomes [preterm birth/birth weight] are obtained as soon as birth occurs)

Adequacy of followup:

Appendix H. Description of Randomized Controlled Trials

Publication characteristics (N=154)

			I risk of bias asse	ssment
Variable	n (%)	High	Unclear	Low
Number of authors (mean, SD)	6.8 (3.3)			
Working group				
Yes	14 (9.1)	11	3	0
No	139 (90.9)	61	78	1
Type of journal				
General medical journal	19 (12.3)	10	9	0
Specialty medical journal	135 (87.7)	62	72	1
Country of corresponding author				
Australia	7 (4.6)	5	2	0
Austria	1 (0.7)	1	0	0
Belgium	1 (0.7)	0	1	0
Canada	3 (2.0)	2	1	0
Chile	1 (0.7)	0	1	0
China	6 (3.9)	3	3	0
Denmark	2 (1.3)	1	1	0
Egypt	1 (0.7)	0	1	0
Finland	1 (0.7)	1	0	0
France	4 (2.6)	0	4	0
Germany	6 (3.9)	2	4	0
Greece	4 (2.6)	0	4	0
India	1 (0.7)	0	1	0
Iran	2 (1.3)	0	2	0
Italy	13 (8.4)	3	10	0
Japan	5 (3.3)	2	3	0
Mexico	1 (0.7)	0	1	0
the Netherlands	6 (3.9)	3	3	0
New Zealand	1 (0.7)	0	1	0
Norway	3 (2.0)	1	2	0
Poland	1 (0.7)	0	1	0
Scotland	1 (0.7)	0	1	0
Singapore	3 (2.0)	1	2	0
South Africa	2 (1.3)	2	0	Ö
South Korea	2 (1.3)	0	2	Ö
Spain	2 (1.3)	1	1	0
Sweden	5 (3.2)	3	2	Ö
Taiwan	2 (1.3)	0	2	Ö
Turkey	5 (3.3)	1	4	0
United Kingdom	13 (8.4)	7	6	Ö
U.S.	49 (31.8)	33	15	1
Impact factor (mean, SD)	5.0 (7.6)		<u>-</u>	

Impact factor (mean, SD)
SD = standard deviation

Trial characteristics (N=154)

		Overal	Overall risk of bias assessment		
Variable	n (%)	High	Unclear	Low	
Study design		•			
RCT crossover	21 (13.6)	10	11	0	
RCT factorial	3 (2.0)	2	1	0	
RCT parallel	126 (81.8)	59	66	1	
RCT split body	4 (2.6)	1	3	0	
Study type	\ -/		-	-	
Efficacy/Superiority	130 (84.4)	61	69	0	
Equivalence	9 (5.8)	4	4	1	
Non-inferiority	2 (1.3)	2	Ö	Ö	
None of the above	6 (3.9)	1	5	Ö	
Unclear	7 (4.5)	4	3	0	
Unit of randomization	7 (4.0)	<u> </u>	<u> </u>		
Cluster	7 (4.6)	5	2	0	
Individual	147 (95.5)	67	79	1	
	147 (95.5)	07	19	ı ı	
Nature of intervention	17 /11 0\	0	0	0	
Behavioral/Psychological	17 (11.0)	9	8	0	
Device	10 (6.5)	3	7	0	
Drug	82 (53.3)	42	39	1	
Natural health product	6 (3.9)	1_	5	0	
Surgical	18 (11.7)	7	11	0	
Vaccine	1 (0.7)	1	0	0	
Other	20 (13.0)	9	11	0	
Intervention type					
Nonpharmacological	67 (43.5)	29	38	0	
Pharmacological	87 (56.5)	43	43	1	
Dosing					
Fixed dose	79 (51.3)	38	40	1	
Flexible dose	31 (20.1)	13	18	0	
Not applicable	41 (26.6)	21	20	0	
Unclear	3 (2.0)	0	3	0	
Placebo controlled	<u> </u>				
Yes	55 (35.7)	27	27	1	
No	97 (63.0)	45	52	0	
Unclear	2 (1.3)	0	2	0	
Number of arms (median, range)	2 (2-7)				
Multicenter	_ (= .)				
Yes	40 (26.0)	25	14	1	
No	100 (64.9)	40	60	Ö	
Unclear	14 (9.1)	7	7	Ö	
Number of centers (range)	1-327		· · · · · · · · · · · · · · · · · · ·	<u> </u>	
Multinational	1.021				
Yes	7 (4.6)	5	2	0	
No	7 (4.6) 147 (95.5)	67	79	1	
Sample size (median, IQR)	63 (39-123)	O1	13	ı	
Sample size (median, rQK) Sample size calculation reported	03 (38-123)				
Yes	Q0 /E1 0\	40	39	4	
res No	80 (51.9)	-		1	
	74 (48.1)	32	42	0	
Funding source (all that apply)	40 (44 =)	_	40	•	
Academic	18 (11.7)	6	12	0	
Foundation	26 (16.9)	11	15	0	
Government	40 (26.0)	22	18	0	
Industry	42 (27.3)	33	9	0	
No funding	7 (4.6)	3	3	1	
Not declared	47 (30.5)	13	34	0	
Other	8 (5.2)	2	6	0	

Primary Diagnostic Category	n (%)
Acute Respiratory Infections	1 (0.7)
Airways	6 (3.9)
Anesthesia	5 (3.2)
Back	1 (0.7)
Bone, Joint and Muscle Trauma	4 (2.6)
Breast Cancer	2 (1.3)
Colorectal Cancer	5 (3.3)
Cystic Fibrosis and Genetic Disorders	1 (0.7)
Depression, Anxiety and Neurosis	6 (3.9)
Drugs and Alcohol	3 (2.0)
Ear, Nose and Throat Disorders	2 (1.3)
Exercise Physiology	6 (3.9)
Eyes and Vision	7 (4.6)
Fertility Regulation	3 (2.0)
Gynecological Cancer	1 (0.7)
HIV/AIDS	2 (1.3)
Heart	11 (7.1)
Hepato-Biliary	4 (2.6)
Immune System	3 (1.9)
Incontinence	1 (0.7)
Infectious Diseases	2 (1.3)
Inflammatory Bowel Disease and Function	2 (1.3)
Lung Cancer	1 (0.7)
Menstrual Disorders and Subfertility	3 (2.0)
Metabolic and Endocrine Disorders	6 (3.9)
Musculoskeletal	8 (5.2)
Neuromuscular Disease	1 (0.7)
Oral Health	3 (2.0)
Other	17 (11.0)
Pain, Palliative and Supportive Care	1 (0.7)
Peripheral Vascular Diseases	4 (2.6)
Pregnancy and Childbirth	5 (3.3)
Prostatic Diseases and Urologic Cancers	1 (0.7)
Public Health	1 (0.7)
Renal	7 (4.6)
Schizophrenia	4 (2.6)
Skin	6 (3.9)
Stroke	4 (2.6)
Tobacco Addiction	1 (0.7)
Upper Gastrointestinal and Pancreatic Diseases	2 (0.7)
Wounds	1 (0.7)

RCT = randomized controlled trial

Outcomes and conclusions (N=154)

		Overal	Overall risk of bias asses	
Variable	n (%)	High	Unclear	Low
Primary outcome				
Objective	74 (48.1)	33	41	0
Subjective	80 (51.9)	39	40	1
Source of outcome assessment				
Administrative data	7 (4.6)	4	3	0
Automated data	21 (13.6)	10	11	0
Clinician assessment	54 (35.1)	24	29	1
Laboratory measure	36 (23.4)	14	22	0
Self-report	36 (23.4)	21	15	0

Risk of bias assessments by domain (N=161)*

	Risk	of bias assessments -	n (%)
Domain	High	Unclear	Low
Sequence generation	1 (0.6)	75 (46.6)	85 (52.8)
Allocation concealment	3 (1.9)	124 (77.0)	34 (21.1)
Blinding	21 (13.0)	79 (49.1)	61 (37.9)
Incomplete data	29 (18.0)	30 (18.6)	102 (63.4)
Selective reporting	17 (10.6)	19 (11.8)	125 (77.6)
Other sources of bias	33 (20.5)	90 (55.9)	38 (23.6)
Overall risk of bias	74 (46.0)	86 (53.4)	1 (0.6)

^{*}All studies assessed for risk of bias

Risk of bias assessments by domain (N=154)*

	Risk	of bias assessments -	n (%)
Domain	High	Unclear	Low
Sequence generation	0 (0.0)	70 (45.5)	84 (54.6)
Allocation concealment	2 (1.3)	119 (77.3)	33 (21.4)
Blinding	21 (13.6)	75 (48.7)	58 (37.7)
Incomplete data	29 (18.8)	27 (17.5)	98 (63.6)
Selective reporting	16 (10.4)	19 (12.3)	119 (77.3)
Other sources of bias	33 (21.4)	86 (55.8)	35 (22.7)
Overall risk of bias	72 (46.8)	81 (52.6)	1 (0.7)

^{*}Non-intervention studies from original sample replaced with trials evaluating healthcare interventions